EXHIBIT 4 Part 1

May 25, 2022

Mr. Benjamin Thepaut
South Carolina Department of Health and Environmental Control
Office of Ocean and Coastal Resource Management
Conway Regulatory Office
1949 Industrial Park Road
Room 140, Conway, SC 29526
Submitted via email: thepaubf@dhec.sc.gov

Subject: **SR Lambert I Solar**
SCDHEC-OCRM Individual Coastal Zone Consistency Package
Georgetown County, South Carolina

Mr. Thepaut,

On behalf of its subsidiaries, Silicon Ranch Corporation (SRC) has authorized HDR Engineering, Inc. (HDR) as its agent to submit the request for an Individual Coastal Zone Consistency (CZC) associated with the SR Lambert I, LLC solar project. SR Lambert I, LLC intend to develop a site south of Andrews, and east of Lambert, South Carolina as a photovoltaic (PV) solar power generating facility. The SR Lambert I site is approximately 1,071 acres within a 2,082 acre parcel in unincorporated Georgetown County, South Carolina. The site is owned by Resource Management Service timber company, with which SRC has an option agreement to explore development of a solar facility.

A Pre-Construction Notification for Nationwide Permit 51 (Land-Based Renewable Energy Facilities) has been submitted to the US Army Corps of Engineers (USACE) with South Carolina Department of Health and Environmental Control (SCDHEC) in copy for concurrence with their Section 401 Water Quality Certification conditions. A copy of the PCN is attached to this application. Per SCDHEC Office of Ocean and Coastal Resource Management (OCRM) request, HDR is providing a detailed alternatives analysis to support the CZC review.

Alternatives Analysis

Offsite Analysis

This section summarizes the alternatives development and screening process for the proposed solar sites. The applicant, Silicon Ranch Corporation, uses several criteria when siting utility-scale solar sites. Table 1 compares the nine sites considered, including the proposed SR Lambert I and II solar facilities. All sites considered are located within the Santee Cooper power service area. HDR also used GIS to assess the potential for wetlands (National Wetland Inventory), streams (National Hydrography Dataset), and floodplains. Desktop analyses maps of each site considered are included in Attachment E.

Site large enough to accommodate 150 to 200 MW of solar (approximately 10 AC needed per 1 MW)
Silicon Ranch considered sites that were able to support approximately 150 to 200 MW of power generation from the solar facility to respond to the power generation goals identified in the Santee Cooper Request for Proposals. The ability to site Lambert I Solar and Lambert II Solar on the same site was important to overall project cost and mobilization schedule. Approximately 7 to 10 acres of land are needed to generate 1 MW of power, so Silicon Ranch focused on properties of approximately 2,000 acres or more of contiguous land. The proposed Lambert site meets the acreage requirements for a 150 to 200 MW solar facility.

Proximity to electric transmission lines and substations
Properties must also be near an existing Santee Cooper and Central Electric Cooperative transmission line and substation. Sites that are far away from existing transmission infrastructure are typically cost prohibitive in that they require easements across multiple properties for an electrical connection from the solar site to the transmission line. The proposed Lambert site has an existing Santee Cooper and Central Electric Cooperative transmission corridor along the western property boundary and US 17 Alternate (Saints Delight Road).

Sites should also be near an existing substation. If solar sites are far away from existing substations, the powerlines may not be able to support the new power and will require costly upgrades. An existing substation is located on Saints Delight Road encompassed by the proposed Lambert site.

Available capacity on transmission network within Santee Cooper power service area
The transmission line must also have the capacity to add up to 200 MW of power to the network at that location. In some cases, a transmission line may be present, but the existing lines are already “full” of power and no additional power from a solar facility can be added. The transmission line on the proposed Lambert site has enough capacity to support the addition of 200 MW of solar power to the Santee Cooper network.

Proximity to paved access roads
Silicon Ranch prioritizes properties that are adjacent to existing paved access roads to facilitate the construction, operation, and maintenance of their solar facilities. All the sites considered were adjacent to or in proximity to paved access roads. The proposed Lambert site is adjacent to US Highway 17 Alternate (Saints Delight Road).

Flat or gently sloping properties
Silicon Ranch prioritizes flat or gently sloping properties, as fixed axis trackers that move to follow the sun are the most effective on these types of properties. All of the sites identified are in the coastal plain of South Carolina and are therefore relatively flat topography or gentle slopes.

Previously disturbed agricultural or silvicultural properties
Silicon Ranch targets agricultural or silvicultural properties, as these are typically large tracts of land with single or few landowners. These sites have also been previously disturbed by agricultural or silvicultural practices and are better suited for development into a solar facility compared to an undisturbed, hardwood forested property. By targeting these types of

properties, Silicon Ranch is minimizing the potential for environmental or cultural impacts in developing solar facilities.

Minimal environmental constraints based on desktop mapping

Part of Silicon Ranch's core values are to responsibly-develop solar facilities that create a long-term value to the surrounding community. During the initial identification of properties, Silicon Ranch uses desktop mapping to identify potential environmental constraints. Silicon Ranch reviews aerial photography, USGS topographic maps, National Wetland Inventory, and FEMA floodplain mapping, USFWS IPaC, state cultural databases (ArchSite), among others. The objective of this desktop review is to identify a site with minimal environmental or cultural constraints and to minimize the federal or state permitting required to develop a project.

Property for sale or lease

Silicon Ranch typically purchases the properties on which they develop solar facilities. In order to develop the solar facility, Silicon Ranch must identify property owners that are willing to either sell or agree to a long-term (20+ year) lease. The proposed Lambert solar site is currently under an option agreement between the current landowner, RMS, and Silicon Ranch. While other viable properties were identified, the land agreement was not reached, and the property was not for sale or lease.

Table 1. Alternative Site Analysis

	Proposed Site	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8
Site large enough to accommodate 150 to 200 MW of solar (approximately 10 AC needed per 1 MW)	2,082 acres	~1,600 acres	~4,800 acres	~3,000 acres	~1,700 acres	~1,050 acres	~2,350 acres	~7,100 acres	~2,100 acres
	Yes	No; risk of not enough land	Yes	Yes	No; risk of not enough land	No; Not enough land	Yes	Yes	Yes
Proximity to electric transmission line	Line on property	Line on property	Line on property	Line on property	Line on property	Requires easement to transmission line	Line adjacent to property	Line on property	No line close enough for interconnection
Available capacity on transmission network within Santee Cooper power service area	Yes	Undetermined	Line at risk of not having enough capacity; not a Santee Cooper line	Undetermined; Not a Santee Cooper line	Yes; low risk	Line at risk of not having enough capacity	Line not owned by Santee Cooper	Yes	No
Proximity to paved access roads	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Flat or gently sloping properties	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Previously disturbed properties	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimal environmental constraints based on desktop mapping	Yes	Endangered species on property	Yes	No, extensive wetlands	Yes	Yes	No, extensive wetlands	Yes	Yes
Property for sale or lease	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
GIS Analysis									
NHD (Linear Feet)	19,503		5,527	37,535	21,749	2,069	21,858	96,730	27,222
NWI (Acres)	75	254	887	765	188	86	902	2,390	235
100-Year Floodplain (Acres)	<0.01		146	74	100		1,857	5,645	231
500-Year Floodplain (Acres)	0		478		1,387				

Silicon Ranch also reviewed the properties provided by the EPA for compliance with the project's purpose and need, which is related to Santee Cooper's 2020 Integrated Resource Plan and SRC's power purchase agreements with the utility. The sites were found to be outside of the Santee Cooper power service area, electrical infrastructure, and/or have development or environmental constraints that would be cost prohibitive for the project.

Onsite Analysis

Silicon Ranch also considered several solar panel layout alternatives during the project development. Alternatives were developed in an effort to avoid and minimize impacts to wetlands and waters of the US.

- An initial solar layout was prepared at the onsite of the project that proposed new gravel access roads running north to south and east to west throughout most of the site. After the identification of wetlands on the site, Silicon Ranch contracted HDR to prepare conceptual and Issued for Permitting (IFP) plans. During the design optimization, the proposed gravel access roads were realigned with the existing logging roads to minimize impacts to wetlands. The design also allowed for the existing network of ditches and non-wetland waters to remain in place, further minimizing impacts to these features. Access roads were also shortened or shifted to avoid further permanent impacts to wetlands.

- Silicon Ranch is coordinating with Santee Cooper on the location and design of the proposed substations and switching station, which will convert the power generated by the solar facility onto the existing transmission line. The initial site of the proposed substations and switching station were in areas later identified as wetlands. Through coordination with Silicon Ranch and Santee Cooper, the substations and switching station have been shifted to upland areas to minimize impacts to wetlands.

- Individual Section 404, Section 401 Water Quality Certification, and CZC applications were initially submitted for the proposed Lambert I and II Solar projects on December 20, 2021. Plans showed 1.34 acre of permanent wetland impacts and 122 acres of clearing and grubbing impact to wetlands related to development of the access roads and solar panels, respectively.

  USACE and SCDHEC issued a 30-day public notice for the project on January 28, 2022. After an agency site visit on February 16, 2022, Silicon Ranch and reviewed the conceptual plans and considered adjustments to the solar array configuration in an effort to avoid additional wetlands. Since completion of the public notice, HDR is in receipt of comments from SCDHEC and OCRM, South Carolina Department of Natural Resources (SCDNR), US Environmental Protection Agency, non-governmental organizations, and the public. In consideration of comments, HDR and Silicon Ranch have revised the proposed panel configuration and plan to use a higher ground coverage ratio to avoid and minimize potential impacts to wetlands and waters of the U.S. The current design alternative has reduced the project impacts to 69 linear feet of impact to non-wetland water and 0.165 acre of wetland.

Should you have any questions or require additional information following your review of the enclosed materials, please contact me at (843) 414-3740 or blair.wade@hdrinc.com.

Kind regards,

HDR Engineering, Inc.

Blair Wade
HDR Project Manager

CC: Connor Echols, Silicon Ranch Corporation

Forms and Attachments

A. CZC Request Form
B. Form D-0489 Energy Facility Checklist
C. Form D-0490 Special Resource Areas Checklist
D. Offsite Alternatives Analyses Maps
E. Copy of Pre-Construction Notification

Attachment A

D-0478 CZC Request Form

DHEC OCRM State Coastal Zone Consistency (CZC) Certification Request Form

Project Name:
SR Lambert I Solar

Applicant Information:	**Agent/Engineer Information:**
Contact Name Connor Echols	Contact Name Blair Wade
Address 222 Second Ave. S. Suite 1900, Nashville, TN 37201	Address 4400 Leeds Avenue, North Charleston, SC 29405
Phone # 703-328-5728	Phone # 843-693-9938
E-mail: connor.echols@siliconranchcorps.com	E-mail blair.wade@hdrinc.com

Site details:
Location/Address:

33.33563, -79.528727: Georgetown County

County:

TMS: 01-0442-026-07-00

Type of Permit Requested: (ex. Landfills, Mining, Wastwater, etc.)	**Name of Permitting Authority(s):** (ex. DHEC Bureau of Water)
Utility scale solar facility	SCDHEC Bureau of Water and USACE

Description of Proposed Activity(s):

- *including total disturbed area, name of and distance to nearest waterbody, and onsite non-jurisdictional wetland impacts and acreage.*

The solar facility would be constructed on an approximate 2,082-acre tract that is predominantly in silviculture management and is actively being timbered. Most of the site has been cleared. The SR Lambert I solar facility is proposed to be developed on approximately 1,071 acres of the 2,082-acre Project site. The site contains several channelized non-wetland waters, which are tributaries to Ditch Branch tributary which flows into the Canaan Branch and Bond Swamp creek; these ultimately lead to the Sampit River which flows into Winyah Bay. The eastern portion of the site drains toward Summons Swamp and ultimately the Sampit River. Approximately 69 linear feet of impacts to non-wetland waters would occur as a result of culvert replacements and improvements for access roads, and approximately 0.165 acre of wetland impacts would occur to construction the solar panels.

All applicable Project Policy Checklist(s) that apply to the proposed project must be submitted with this request form. (See www.scdhec.gov/environment/ocrm/czc for available Policy Checklists)

Submitted By: EBGWade Date: May 25, 2022

Attachment B

D-0489 Energy Facility Checklist

Policy Group XI - Energy Facility Planning

Project Name: SR Lambert I
TMS: 01-0442-026-07-000

* Policies excerpted from the GAPC Section of the CZMP as well as Chapter IX.

The Agency's Coastal Zone Consistency (CZC) certification review of all activities within the Coastal Zone that require a State permit will be based on the policies contained within the project based checklists. For the CZC request to be complete, you must answer the questions contained within the policies segment relative to your project by checking off all that apply. More than one checklist may apply to your project based on the plan proposal. For example, a road or highway project might also require dredging and filling of coastal wetlands.

A) **Energy Facilities:**

Required: Will your proposed project or plans…

a. ☐ require the facility to be located on the waterfront based on an activity that would benefit unless there are no feasible alternatives exist or there is an overriding public interest and that any substantial environmental impact can be minimized?

☑ or is this N/A?

b. ☐ (for water-dependent facilities) be located on currently maintained channels or rivers to reduce the need for dredging of new channels or is consistent with Chapter VIII, Dredging policies?

☑ or is this N/A?

c. ☑ expand upon an existing energy and energy-related facility and be consistent with applicable Federal and State air and water quality standards?

Sited adjacent to existing transmission lines.

☐ or is this N/A?

d. ☑ meet the applicable water quality and effluent limitation standards of the EPA, DHEC (NPDES), and Sections 401 and 402 of the Clean Water Act?

☐ or is this N/A?

e. ☑ meet applicable State and Federal air pollution standards and controls, as based on the National Clean Air Act?

☐ or is this N/A?

f. ☐ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage?

☑ or is this N/A?

g. ☐ contain utilization of groundwater resources either in the processing or effluent discharge stages of the production process that:
   1) ☐ meets existing standards and/or management programs of the Department;
   2) ☐ prevent saltwater intrusion and land subsidence, to the extent feasible;
   3) ☐ wherever feasible, provide for a natural vegetated area on the site where aquifer recharge or percolation can occur to mitigate the impacts of groundwater withdrawals?

No groundwater withdrawals.

☑ or is this N/A?

h. ☑ avoid the filling, dredging and/or drainage of productive fresh, brackish and saltwater wetland areas or demonstrates that no feasible alternative exists or there is an overriding public interest and any substantial environmental damage can be minimized? Explain the feasible alternatives that will be implemented and provide a summary of mitigation details on an attached document.

See alternatives analysis and mitigation in attachments.

☐ or is this N/A?

i. ☑ (for filling, ditching, clearing, or excavation of wetlands) demonstrate mitigation sites or practices to offset the losses of wetlands consistent with the Division's Mitigation Guidelines? The types of mitigation include wetland buffers, creation of wetlands, and restoration of existing wetlands, offsite mitigation, and mitigation banking. Provide a summary of mitigation details on an attached document.

Silicon Ranch will purchase mitigation credits. See attached.

☐ or is this N/A?

j. ☐ include other activities associated with energy or energy-related production consistent with the Resource policies that govern them?

☑ or is this N/A?

k. ☑ minimize erosion and sedimentation to limit the impacts from direct stormwater discharge into adjacent water bodies and wetlands include in site location, construction and design (whenever feasible):

1) ☑ a buffer strip of natural vegetation between the facility and the water's edge;
2) ☑ controls for stormwater run-off, soil erosion, and accidental placement of sediments in wetland areas;
3) ☐ the use of permeable surfaces in parking lots and bulk storage areas to provide water recharge areas and minimize the effects of stormwater run-off;
4) ☑ retainment of open space or natural (undisturbed) areas around sites as buffer zones and recharge areas?

☐ or is this N/A?

l. ☐ meet applicable flood management and construction requirements as required by the Federal Flood Insurance Program if the facility is located inside a flood prone area?

☑ or is this N/A?

m. ☑ provide for buffer areas and protect salt, brackish and freshwater wetlands, which help absorb flood water surges if the facility is located in a flood prone area?

☐ or is this N/A?

n. ☑ take into account an evaluation of forecasted need for the facility (for electric generating facilities) and alternative means of meeting the energy demands, whenever feasible?

☐ or is this N/A?

o. ☑ demonstrate (for all energy or energy-related facility applications) the following considerations of available alternative sites must take into account the extent and severity of environmental disruption at various sites; short and long-range economic and social impacts on the community for various sites; and the comparison of the degree to which the proposal could be modified at different sites if necessary to more fully meet environmental standards?

☐ or is this N/A?

p. ☑ demonstrate the extent and significance of negative impacts (in the review of energy and energy-related facilities, including oil refineries and petrochemical facilities) on the quantity or quality of these valuable coastal resources: unique natural areas; endangered wildlife or vegetation or significant marine species (as identified in the Living Marine Resources segment); degradation of existing water quality in the area; public recreational lands; interruption of existing public access; historic or archeological resources?

See attachments. No public lands.

☐ or is this N/A?

q. ☑ demonstrate the preference of placing cables, pipelines, and transmission lines in non-wetland areas to minimize adverse environmental impacts?

☐ or is this N/A?

r. ☑ take into account the policy requirements for the installation of cables, pipelines, and transmission lines? In this regard, do the plans:
1) ☑ avoid the creation of permanent open water canals to install pipelines;
2) ☑ limit dimensions of excavated canals for cables and pipelines;
3) ☑ propose to restore (backfill with excavated material) all excavations in wetland areas to original marsh elevation;
4) ☑ employ appropriate erosion control measures during the crossing of wetland areas;
5) ☑ utilize existing rights-of-way and topographic features for new alignments, wherever possible;
6) ☑ consider revegetation with suitable wetland species and silt curtains for all excavations?

☐ or is this N/A?

s. ☐ avoid offshore munition areas, chemical and waste disposal areas, and geological faults, as determined significant by authoritative sources, and wherever possible shall avoid heavily used waterways and significant and productive fish and shellfish habitats?

☑ or is this N/A?

t. ☑ follow existing roadways and railways and be attached to bridges and crossovers where applicable, especially in wetland areas, to prevent unnecessary alteration or disruption of adjacent wetlands or waterways?

Aligns with existing transmission infrastructure.

☐ or is this N/A?

u. ☐ (for nuclear power plants or liquefied natural gas (LNG) facilities) be located out of hazardous areas such as geological faults or flood prone areas as determined significant by authoritative sources?

☑ or is this N/A?

v. ☐ (for nuclear power plants or liquefied natural gas (LNG) facilities) be located out of areas of significant population, except where no feasible alternative exists or an overriding public need can be demonstrated? Explain the feasible alternatives that will be implemented in the summary section below.

☑ or is this N/A?

w. ☐ (for nuclear power plants) include plans for temporary and permanent disposal of all types of nuclear waste which will be associated with a proposed nuclear power plant in determining the overall safety and environmental impacts of the nuclear power plant?

☑ or is this N/A?

x. ☐ consider transportation patterns associated with proposed liquefied natural gas facilities in determining the overall safety and environmental impacts of the LNG facility including converted gas moved by pipelines unless no other feasible alternatives are available?

☑ or is this N/A?

Recommended policies to consider in designing energy facilities:

a) *The location of new energy and energy-related facilities is generally preferred in already developed areas which are capable of accommodating additional development without significant expenditure of public funds for infrastructure or in areas which the local government and OCRM deem to be both environmentally and economically compatible with the type of energy development proposed. Thus, onshore development is preferred where adverse physical, economic, and institutional impacts will be less than those which are likely to be experienced in less developed areas such as those which are more dependent on tourism and the resort industry. (The exception to this siting policy would be the locating of liquefied natural gas (LNG) and nuclear facilities. Specific policies included on the preceding pages shall apply in these two instances.) Care should be taken that proposed new facilities be located, wherever possible, in areas where they will minimize disruption of existing land use of the area.*

b) *Renewable sources of energy such as solar, wind, tidal power, geothermal and biomass, including experimental and demonstration projects, will be encouraged to locate in the coastal zone to the extent that they meet all Federal and State air and water quality standards and are consistent with other OCRM policies.*

c) *The use of recoverable energy sources such as co-generation (combined industrial production of electricity and heat) is also encouraged.*

d) *Upgrading of old generating facilities operated by each energy supplier is preferred to construction of new facilities by that supplier.*
e) *Recommendations of the U.S. Department of Energy to encourage the development of small-scale, diversified, dispersed industrial systems are encouraged.*
f) *A coordinated effort in consumer, commercial, industrial, governmental and recreational energy conservation and support for the Department of Energy Extension Service Concept is encouraged.*

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and [illegible] attached.

Signature and date

Attachment C

D-0490 Special Resource Areas Checklist

Policy Group XII - Activities in Areas of Special Resource Significance

Project Name: SR Lambert I Solar
TMS: 01-0442-026-07-00

The Agency's Coastal Zone Consistency (CZC) certification review of all activities within the Coastal Zone that require a State permit will be based on the policies contained within the project based checklists. For the CZC request to be complete, you must answer the questions contained within the policies segment relative to your project by checking off all that apply. More than one checklist may apply to your project based on the plan proposal. For example, a road or highway project might also require dredging and filling of coastal wetlands.

A) **Barrier Islands:**

Required: Will your proposed project or plans on a barrier island…

a. ☐ retain to the extent feasible existing dune ridges, drainage patterns and natural vegetation in landscaping and construction plans in order to maintain the value of the island as a storm buffer?

☑ or is this N/A?

b. ☐ demonstrate reasonable precautions to prevent or limit any direct negative impacts on the adjacent critical areas (beaches, primary dunes, coastal waters and wetlands) because of their proximity to and strong ecological relationship with the critical areas of the coastal zone?

☑ or is this N/A?

c. ☐ avoid new road or bridge projects involving the expenditure of public funds to provide access to previously undeveloped barrier islands unless an overwhelming public interest can be demonstrated such as access to a public recreation area or facility?

☑ or is this N/A?

d. ☐ include the extension of public services, such as sewer and water facilities that are proposed in a comprehensive approach, which considers the natural "carrying capacity" of the island to support development and which integrates these facilities to parallel the level of access which is available to the island?

☑ or is this N/A?

e. ☐ include any efforts to acquire portions of the barrier island for inclusion in preservation and protection programs?

☑ or is this N/A?

f. ☐ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage?

☑ or is this N/A?

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

EBGWade

Signature and date

B. Dune Areas:

Required: Will your proposed project or plans in dune areas…

a.	☐ demonstrate reasonable precautions to prevent or limit any direct negative impacts on the adjacent critical areas because of proximity to and strong physical and ecological relationship with the beach and primary sand dune critical areas of the coastal zone? ☑ or is this N/A?
b.	☐ prevent or mitigate negative impacts on adjacent property owners, specifically, increased erosion or loss of protective dune formations on adjacent lots due to unnecessary destruction of or encroachment onto stable dunes? ☑ or is this N/A?
c.	☐ be consistent with the policies of the Beach Erosion, and Beach and Shoreline Access sections (Chapter IV - 41) of the CZMP, as well as other applicable Resource Policies? ☑ or is this N/A?
d.	☐ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage? ☑ or is this N/A?

Recommended policies to consider in designing impoundments:

a. *Local governments with coastal shorefronts are encouraged to develop and implement strong local zoning and building ordinances for beach and sand dune areas.*
b. *Property owners, development interests and local governments are encouraged to institute and observe set-backs or buffer zones for construction in beach and dune areas.*

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

EBGWade

Signature and date

C. Navigational Channels

Required: Will your proposed project or plans in navigable channels…

a.	☐ avoid losses to existing navigability? ☑ or is this N/A?
b.	☐ utilizes best mitigation measures feasible for development which might increase upland soil and shoreline erosion problems and resulting siltation of navigation channels? ☑ or is this N/A?
c.	☐ avoid interfering with commercial navigation in designated shipping channels? ☑ or is this N/A?
d.	☐ be consistent with the Dredging and Dredge Material Disposal policies contained within the CZMP? ☑ or is this N/A?
e.	☐ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage? ☑ or is this N/A?

Required:

On an attached sheet, briefly summarize how your project is consistent with the policies of the South Carolina Coastal Zone Management Program listed above.

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that my project is consistent with [illegible] tal Zone Management Program.

EBGWade

Signature and date

D. Public Open Spaces (State or Local Parks):

Required: Will your proposed park project or plans…

a.	☐ avoid restriction or limitation of the continued use of a recreational open area or disruption of the character of such a natural area (aesthetically or environmentally)? ☑ or is this N/A?
b.	☐ increase the amount and distribution of public open space and recreational areas in the coastal zone? ☑ or is this N/A?
c.	☐ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage? ☑ or is this N/A?

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

E. Wetlands:

Required: Will your proposed project or plans…

a.	☐ require the fill or other significant permanent alteration of a productive freshwater marsh? If so, does your project demonstrate that no feasible alternative exists or there is an overriding public interest? Explain why there are no feasible alternative exists and what the public interest is in the summary section below. ☑ or is this N/A?
b.	☑ (for filling, ditching, clearing, or excavation of wetlands) demonstrate mitigation sites or practices to offset the losses of wetlands consistent with the Division's Mitigation Guidelines? The types of mitigation include wetland buffers, creation of wetlands, and restoration of existing wetlands, offsite mitigation, and mitigation banking. Provide a summary of mitigation details on an attached document. Mitigation credits will be purchased. ☐ or is this N/A?
c.	☑ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage? ☐ or is this N/A?

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

Attachment D

Copy of Section 404 Pre-Construction Notification

May 25, 2022

Mr. Wiley Bracey
U.S. Army Corps of Engineers
1949 Industrial Park Road, Room 140
Conway, South Carolina 29526

Re: Silicon Ranch Lambert I Solar, Georgetown County, South Carolina
Pre-Construction Notification Pursuant to Nationwide Permit No. 51
SAC 2021-00411

Mr. Bracey,

In order to generate renewable energy under power purchase agreements with Santee Cooper and to align with Santee Cooper's 2020 integrated resource plan, Silicon Ranch Corporation (SRC) proposes to construct the Lambert I and II solar facilities on approximately 2,000-acre property in Georgetown County, South Carolina. SRC, the applicant, and HDR, Inc. (HDR), the agent, previously submitted a Section 404 individual permit application, Section 401 water quality certification, and state coastal zone consistency request for the project on December 20, 2021. A public notice was issued on January 28, 2022. Comments were forwarded to SRC and HDR after completion of the 30-day comment period.

Since this time, SRC and HDR have revised the density of the solar panels and reconfigured the site to minimize impacts to wetlands and waters of the US. On behalf of SRC, HDR is submitting a Pre-Construction Notification for Nationwide Permit (NWP) 51 (Land-Based Renewable Energy Generation Facilities) for the Lambert I Solar facility under Section 404 of the Clean Water Act. SRC and HDR are also requesting issuance of a Delineation Concurrence with the NWP authorization. In addition to this letter, HDR has enclosed revised permit drawings and compensatory mitigation calculations.

Should there be any questions or additional information required following the review of the enclosed materials, please contact me at (843) 414-3740 or blair.wade@hdrinc.com should you have any questions or require additional information.

Kind regards,

Blair Wade

HDR Project Manager
Southeast Renewable Energy Lead

Attachments: Supplemental Information
Adherence to General and Regional NWP Conditions
Joint Federal and State Application Form
Attachment A: Figures and Permit Drawings
Attachment B: Adjacent Property Owners
Attachment C: USACE Wetland and Stream Mitigation Worksheets
Attachment D: Agency Consultation

CC: Connor Echols, Silicon Ranch Corporation
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Ben Thepaut, SCDHEC-OCRM

Supplemental Information

32. Description of the Overall Project and of Each Activity in or Affecting U.S. Waters or State Critical Areas

Silicon Ranch Corporation (SRC) is a renewable energy developer founded in 2011 and based in Nashville, Tennessee. Under the proposed project, Santee Cooper would enter into a 30-year power purchase agreement (PPA) with SRC, via SR Lambert I, LLC and SR Lambert II, LLC, who would construct and operate two single-axis tracking PV solar power facilities directly adjacent to each other on a 2,082-acre site in Georgetown County, South Carolina. The Project is located on land currently owned by RMS, a timber management company. The site is bound to the north by Alt. US 17 (Saints Delight Road), to the east by Wild Horse Road, to the south by County Road S-22-387, and to the west by Windum Drive. The Project is approximately 6.7 miles south of the town of Andrews, South Carolina.

The Project Area has been in silviculture for over fifty years based on historic aerial imagery and USGS topographic maps. The site is under active silviculture and large portions of the site have been timbered. A network of ditches is present on the site that support an altered hydrology. A series of unpaved roads are located within the Project, largely providing access to different timber stands.

The proposed facility would connect to the existing Santee Cooper 230-kV transmission powerline adjacent to the Santee Cooper owned substation, which are both located within or immediately adjacent to the site.

Proposed Solar Facility

The SR Lambert I solar facility is proposed to be developed on approximately 1,071 acres of the 2,082-acre parcel. Approximately 16 to 20-feet-wide gravel access roads, which predominantly align with existing timber roads, would provide vehicular access to construct and maintain the solar panels and inverters.

Anti-reflective solar panels would be used, which minimizes the potential for glare or “lake” effects. The arrays would connect to central inverters to convert the DC electricity generated by the solar panels into AC electricity for transmission across the Project’s electrical collection system and to the Santee Cooper distribution system.

The PV panels would be mounted on motor-operated axis tracker structures, commonly referred to as single-axis trackers. The axis trackers would be designed to pivot the panels along their north-south axes to follow the path of the sun from the east to the west across the sky. The tracker assemblies would be constructed in parallel north-south rows using steel piles.

Erosion and Sediment Control

The project design would adhere to SCDHEC and Georgetown County stormwater management regulations and standards. As part of NPDES permit authorization, the site-specific SWPPP would be finalized with the final grading and civil design and would address all

construction-related activities prior to construction commencement. Silt fence, sedimentation basins, and other appropriate controls would be used, as needed, to minimize exposure of soil and to prevent eroded soil from leaving the work area. No sediment basins would be placed within wetlands. Disturbed areas would be seeded post-construction using a mixture of certified weed-free, low-growing native grass seed obtained from a reputable seed dealer and in compliance with the requirements established by the local office of the Natural Resource Conservation Service (NRCS). Erosion control measures would be inspected and maintained until vegetation in the disturbed areas has returned to the preconstruction conditions or the site is stable. Water would be used for soil compaction and dust control during construction.

A construction assembly area (laydown area) would be constructed in uplands for worker assembly, vehicle parking, and material storage during construction. Following completion of construction activities, all trailers, unused materials, and construction debris would be removed from the site.

Construction

After installation of erosion and sediment control, SRC would construct access roads, primarily using existing timber roads. SRC's standard practice, which would be employed on the Lambert I and II Solar facilities, is to work with the existing landscape (e.g., slope, drainage, utilization of existing roads) where feasible to minimize or eliminate grading work to the greatest extent possible. Due to the existing flat topography of the site and the use of single-axis tracking, minimal grading activities would be required to achieve the final design. No grubbing or grading would occur in wetlands.

SRC is considering implementation of the SCDNR's Technical Guidance for the Development of Wildlife & Pollinator Habitat at Solar but has not determined if they will seek certification of the sites at this time. Pollinator plantings around the perimeter of the site and the use of wildlife fencing are proposed on the project. Vegetative screening is also proposed in areas where residences are adjacent to or across from the proposed solar site.

The PV panels would be installed in parallel north-south rows on the Project site. The arrays would contain an inverter and trackers of panels. Electrical cables would connect the rows of PV panels to central inverters. Solar panels will no longer be placed over wetlands and would not result in trenching impacts. If a medium-voltage or other electrical connection must cross a wetland, it will be directionally drilled below the wetland with pits located in uplands.

The project would connect to an existing Santee Cooper transmission line that follows the western portion of the site. A substation and switching station will be constructed in uplands adjacent to the transmission line. The project would be secured with an inverted wildlife fence which allows for the passage of small mammals and other animals. In wetlands, the fence would be pile driven and not trenched. The fence is currently shown crossing non-wetland waters and would be designed to avoid placing poles within the waters or impede flow. Construction activities would take approximately 18 to 22 months to complete (anticipated to begin in September 2022).

Project Operations

During operation of the solar facility, no major physical disturbance would occur. Except for fence repair, vegetation control, and periodic array inspection, repairs, and maintenance, the facility would require relatively little human activity during operation. Permanent lighting would be required at the substations during operations.

The Project site would not be staffed during operation; however, inspection and maintenance is required biannually and in the case of equipment failures. Vegetation on the site would be maintained to control growth and prevent shading of the PV panels or interference with the tracking mechanisms. Maintenance of vegetation in wetlands within 200-feet of the proposed panels may occur every 3 to 5 years to prevent trees from shading the nearby solar panels. No grubbing would occur within the wetlands. Selective use of spot herbicides may also be employed around structures to control any invasive weed outbreak. Sheep grazing is not proposed for the Lambert Solar sites.

Decommissioning and Reclamation

The Project would operate and sell power under PPAs with Santee Cooper and Central Electric Cooperative for up to 25 years. At the end of the PPA, the Project staff and Santee Cooper or Central Electric Cooperative would assess whether to cease operations at the Project site or enter into a new power purchase contract or other arrangement. If Santee Cooper, Central Electric Cooperative, or another entity is willing to enter into such an agreement, the Project could continue operating. If no commercial arrangement is possible, then the facility would be decommissioned and dismantled, and the site would be restored. In general, most of the decommissioned equipment and materials would be recycled. Materials that cannot be recycled would be disposed of at an approved facility. Georgetown County's temporary zoning permit and the project's plans, funds, and agreements require SRC to decommission the project after its useful life. After decommissioning, the site will revert to its current zoning.

Site Characteristics

Wetland Delineation

Prior to undertaking fieldwork, HDR scientists conducted a desktop review of the Project Area utilizing a number of resources including U.S. Geological Survey (USGS) topographic maps (Attachment A, Figure 2), aerial imagery (Attachment A, Figure 3), United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) Soil Survey (Attachment A, Figure 4), the USGS National Hydrography Dataset (NHD), U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), and Federal Emergency Management Act (FEMA) floodplains (Attachment A, Figure 5). All figures are in Attachment A.

Jurisdictional waters of the U.S. were delineated according to the methodology and guidance described in the USACE 1987 Wetland Delineation Manual and the 2010 USACE Atlantic and Gulf Coastal Plain Regional Supplement (Version 2.0). Field work was initially conducted from mid-June through early July 2020, during a period of above average rainfall based on the USACE Antecedent Precipitation Tool. The site was revisited May 3 – 7, 2021 during a period of

slightly below average rainfall. A request for an Approved Jurisdictional Determination (AJD) was submitted to the USACE Conway Regulatory Office on August 30, 2021 under the 2020 Navigable Waters Protection Rule, which has since been vacated. A site visit with the USACE was conducted on October 20, 2021 during slightly below average rainfall conditions. Field work as conducted November 8 – 10, 2021 in consideration of current wetlands and waters of the US regulations and data collected during the USACE site visit. Wetland boundaries have been revised and are reflected in the permit drawings.

The Lambert I Solar site contains approximately 16,463 linear feet of non-wetland waters (streams) and 157.20 acres of wetlands (Attachment A, Figure 6). A summary of on-site wetlands and non-wetland waters is summarized in Table 1.

Table 1. Summary of on-site wetlands and non-wetland waters of the U.S. on Lambert I Solar

Feature Name	Latitude/ Longitude (decimal degrees)	Type of Aquatic Resource	Cowardin Classification	Estimated Amount of Aquatic Resource in Review Area
Stream 1	33.348540/ -79.525131	non section 10 - non-wetland	R4SB	Length: 0 ft.[1]
Stream 2	33.344976/ -79.528536	non section 10 - non-wetland	R5UB	Length: 0 ft.
Stream 3	33.322933/ -79.540133	non section 10 - non-wetland	R4SB	Length 10,601 ft.
Stream 4	33.322028/ -79.53768	non section 10 - non-wetland	R4SB	Length: 555 ft.
Stream 5	33.332287/ -79.558224	non section 10 - non-wetland	R5UB	Length: 5,307 ft.
Wetland 1	33.348376/ -79.517711	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 2	33.347505/ -79.520419	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 3	33.345799/ -79.523997	non section 10 - wetland	PEM/PFO	Area: 0 ac.
Wetland 4	33.342156/ -79.518865	non section 10 - wetland	PEM	Area: 0 ac.
Wetland 5	33.340963/ -79.521878	non section 10 - wetland	PEM	Area: 0 ac.
Wetland 6	33.340808/ -79.528082	non section 10 - wetland	PFO	Area: 0 ac.

[1] A “0” indicates resource is found on Lambert II Solar.

Feature Name	Latitude/ Longitude (decimal degrees)	Type of Aquatic Resource	Cowardin Classification	Estimated Amount of Aquatic Resource in Review Area
Wetland 7	33.337144/ -79.52334	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 8	33.336951/ -79.527038	non section 10 - wetland	PEM	Area: 0 ac.
Wetland 9	33.336978/ -79.529045	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 10	33.335455/ -79.525193	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 11	33.334746/ -79.526295	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 12	33.334189/ -79.525796	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 13	33.331351/ -79.526805	non section 10 - wetland	PFO	Area: 0 ac.
Wetland 14	33.329868/ -79.530634	non section 10 - wetland	PEM	Area: 2.44 ac.
Wetland 15	33.328895/ -79.527717	non section 10 - wetland	PFO	Area: 1.27 ac.
Wetland 16	33.328095/ -79.531049	non section 10 - wetland	PFO	Area: 0.87 ac.
Wetland 17	33.327438/ -79.5343	non section 10 - wetland	PFO	Area: 0.76 ac.
Wetland 18	33.330578/ -79.537083	non section 10 - wetland	PEM	Area: 43.15 ac.
Wetland 19	33.322144/ -79.545982	non section 10 - wetland	PFO	Area: 8.26 ac.
Wetland 20	33.327506/ -79.548882	non section 10 - wetland	PFO	Area: 1.71 ac.
Wetland 21	33.325290/ -79.55384	non section 10 - wetland	PFO	Area: 0.16 ac.
Wetland 22	33.323014/ -79.555049	non section 10 - wetland	PFO	Area: 1.55 ac.
Wetland 23	33.324534/ -79.556612	non section 10 - wetland	PEM	Area: 0.54 ac.
Wetland 24	33.326180/ -79.559246	non section 10 - wetland	PEM	Area: 0.33 ac.
Wetland 25	33.328364/	non section 10 -	PFO	Area: 0.37 ac.

Feature Name	Latitude/ Longitude (decimal degrees)	Type of Aquatic Resource	Cowardin Classification	Estimated Amount of Aquatic Resource in Review Area
	-79.557477	wetland		
Wetland 26	33.329350/ -79.557537	non section 10 - wetland	PFO	Area: 2.58 ac.
Wetland 27	33.328793/ -79.560667	non section 10 - wetland	PFO	Area: 0.58 ac.
Wetland 28	33.330157 -79.560916	non section 10 - wetland	PEM	Area: 2.20 ac.
Wetland 29	33.331952/ -79.551454	non section 10 - wetland	PEM	Area: 36.56 ac.
Wetland 30	33.328238/ -79.5662	non section 10 - wetland	PFO	Area: 36.16 ac.
Wetland 31	33.334380/ -79.557711	non section 10 - wetland	PEM	Area: 5.45 ac.
Wetland 32	33.338673/ -79.553035	non section 10 - wetland	PEM	Area: 7.91 ac.
Wetland 33	33.338642/ -79.548373	non section 10 - wetland	PEM	Area: 4.35 ac.
Wetland 34	33.339019/ -79.540381	non section 10 - wetland	PEM/PFO	Area: 0 ac.
Wetland 35	33.340351/ -79.537589	non section 10 - wetland	PEM	Area: 0 ac.
Wetland 36	33.345332/ -79.538974	non section 10 - wetland	PEM	Area: 0 ac.

Threatened and Endangered Species

HDR submitted a threatened and endangered species consultation letter (Attachment D) to the United States Fish and Wildlife Service (USFWS) on December 8, 2021 to describe potential impacts to protected species likely to occur on or in the vicinity of the proposed project. Species addressed include those listed under the Endangered Species Act (ESA). HDR consulted the USFWS Information for Planning and Consultation (IPaC) database and the South Carolina Department of Natural Resources (SCDNR) database for lists of federally protected species with potential to occur within the Study Area and in Georgetown County, SC (Attachment D).

The site contains potential suitable habitat for the Northern Long Eared Bat (NLEB) and candidate-species monarch butterfly. Small pockets of summer roosting habitat for the NLEB and limited foraging habitat for the monarch butterfly occur in the Study Area. To the extent possible, the proposed project would minimize effects on NLEB by conducting the remaining tree clearing in mapped suitable roosting habitat during the inactive season (November 15th to

March 31st). The proposed project may affect but is not likely to adversely affect the NLEB and monarch butterfly.

The USFWS issued a response on December 9, 2021 agreeing with HDR's conclusion that the project would not result in a take of federally protected species. A copy of their response and recommendations are included in Attachment D.

A bald eagle has been identified flying over the proposed solar site; a nest has not been identified on the site or in proximity to the site. SRC will conduct a pre-construction survey for bald eagles and their nests prior to construction. If a nest is identified within 660-feet of the project site, HDR will notify USFWS and follow the USFWS's National Bald Eagle Management Guidelines.

Section 106 of the National Historic Preservation Act

On May 7, 2021, HDR submitted a Section 106 Project Review Form and supplemental Project information to the State Historic Preservation Office (SHPO) at the South Carolina Department of Archives and History (SCDAH). The SHPO provided a response on June 22, 2021 and recommended a phased investigation of the project area's potential to contain historic properties, beginning with archival research and a reconnaissance-level survey. HDR conducted a cultural resources assessment of the project in accordance with SHPO's recommendations. On August 19, 2021, HDR conducted an archaeological reconnaissance survey of selected portions of the APE. A cultural resources assessment memorandum was submitted to SHPO on September 2, 2021.

The archaeological Area of Potential Effect (APE) is considered to be the limits of the SR Lambert Project. The cultural resources assessment includes background research and limited archaeological reconnaissance fieldwork. There are no standing structures on the Project and no survey-eligible structures are near the site, therefore, an architectural survey was not conducted, nor is one recommended.

HDR identified no archaeological resources during the archaeological reconnaissance of the Project. There are no previously recorded historic properties within the Project. There are no historic architectural resources within or near the Project. Most of the Project is covered in wetlands. Non-wetland areas are very flat, with no discernable topography. The entire Project has been intensively timbered numerous times and is currently covered in silviculture planted pines, many large areas of which have been timbered/clear cut within the past year. As a result of extensive silviculture, the soils at the Project are heavily disturbed. As such, there are no intact soils within the Project.

Based on historic map and aerial photograph research and archaeological reconnaissance investigations of areas considered to have a higher potential for archaeological resources, HDR considers the probability of this undertaking affecting any cultural resources, much less significant cultural resources, to be extremely low. HDR recommended that no additional cultural resources survey of the SR Lambert Project is necessary.

SCDAH responded in an informal consultation letter dated September 21, 2021, stating "If the SR Lambert Project were to require state permits or federal permits, licenses, funds, loans, grants, or assistance for development, we would recommend to the federal or state agency or agencies that additional cultural resources/historic property identification survey of the project area, as currently proposed, is not needed." See Attachment D.

Essential Fish Habitat (EFH)
As defined by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976, as amended in 1996, Essential Fish Habitat (EFH) is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (16 USC 1802, 50 CFR §600.10). No EFH is present within the project area.

401 Water Quality
SCDHEC has issued a Section 401 Water Quality Certification for Nationwide Permit 51 with a condition that the proposed project does not "cause the loss of more than 300 linear feet of stream bed." The proposed Lambert I Solar project meets this condition. The project has been designed and will be constructed to ensure that existing water quality classifications and standards are maintained through the use of various stormwater control Best Management Practices (BMPs). The proposed impacts would occur in the Carolina Coastal-Sampit (Hydrologic Unit Code [HUC] 03040207) watershed.

The National Pollutant Discharge Elimination System (NPDES) permit program regulates point source pollution by considering stormwater discharges, non-point sources, and natural background sources. Construction activities associated with the project will also require SCDHEC approval under the SC Pollution Control Act and the provisions of the Clean Water Act. Specifically, the project will be developed in compliance with the *SC NPDES General Permit for Stormwater Discharges from Construction Activities*. Best management practices (BMPs) will be followed to minimize sedimentation. Conceptual design includes temporary sediment basins within the footprint of the project site. The final design of the proposed project would take into consideration the increase in the amount of stormwater during the stormwater modeling process.

Floodplains
No FEMA floodplains were depicted for Project Area. The Project Area is in Zone X. Zone X is an area determined to be outside of the 500-year flood plain (FEMA FIRM Panel 350 of 490, Community Panel 4500850350E) (Attachment A, Figure 5).

Anticipated Impacts to Wetlands and Waters of the US
Wetlands have been managed in timber production for over fifty years and are currently undergoing active silviculture management or have been recently cleared. Wetland hydrology, soils, and vegetation are altered and have very impaired functions. The project is expected to result in approximately 0.165 acres of permanent wetland impact associated with the construction of the solar arrays.

Most of the streams (non-wetland waters) identified onsite have been channelized. Two permanent impacts to non-wetland waters are anticipated to replace and improve existing culverts, resulting in 69 linear feet of impact. The culvert on Stream (Non-Wetland Water) 3 is currently damaged and will be replaced and extended for the access road. The culvert on Stream (Non-Wetland Water) 5 will be replaced and extended for an access road to the Santee Cooper switching station and Silicon Ranch substation.

33. Overall Project Purpose and the Basic Purpose of Each Activity In or Affecting U.S. Waters

The overall purpose of the project is to develop solar energy resources in support of Santee Cooper's 2020 Integrated Resource Plan (IRP), which includes an initial goal for 500 MW of solar capacity, and an additional 1,000 MW of solar resources to be secured between 2023 and 2032. Solar facilities would be located near Santee Cooper's primary load centers near the coast but would be geographically dispersed to achieve production diversity while maintaining significant economies of scale. Santee Cooper secures solar energy through the development of Power Purchase Agreements (PPA) with solar developers.

On October 15, 2019, Santee Cooper issued a Request for Information (RFI) from potential solar resource developers, and on June 5, 2020, Santee Cooper issued a Request for Proposals for Solar Power. Silicon Ranch Corporation selected to build, own, and operate two projects (Lambert I and Lambert II) in Georgetown County totaling 200 MW.

36. Individually list wetland impacts including mechanized clearing, fill, excavation, flooding, draining, shading, etc. and attach a site map with location of each impact

The following table provides a summary of permanent impacts associated with culvert replacements and improvements and construction of the proposed solar arrays.

Table 2. Wetland Impact Table

Figure Number	Wetland Number	Wetland Type	Distance to Receiving Water Body (LF)	Purpose of Impact	Impact Size (Acres)
Figure 7, Page 1	31	PFO4f	300'	Permanent Fill; Solar Array Impact	0.03
Figure 7, Page 1	31	PFO4f	300'	Permanent Fill; Solar Array Impact	0.02
Figure 7, Page 2	18	PFO4f	>1000'	Permanent Fill; Solar Array Impact	0.02
Figure 7, Page 2	18	PFO4f	>1000'	Permanent Fill; Solar Array Impact	0.005

Figure 7, Page 3	18	PFO4f	>1000'	Permanent Fill; Solar Array Impact	0.04
Figure 7, Page 3	18	PFO4f	>1000'	Permanent Fill; Solar Array Impact	0.04
Figure 7, Page 3	18	PFO4f	>1000'	Permanent Fill; Solar Array Impact	0.01
				Total Permanent Fill	**0.165**
Figure Number	**Stream Number**	**Flow Type**	**Average Stream Width (LF)**	**Impact Type**	**Impact Length (LF) and Area (AC)**
Figure 7 Page 1	Non-Wetland Water (Stream) 5	Perennial	10’	Permanent Impact (Culvert)	50 LF (0.01 AC)
Figure 7, Page 2	Non-Wetland Water (Stream) 3	Perennial	5’	Permanent Impact (Culvert)	19 LF (0.004 AC)
				Total Permanent Stream Impact	**69 LF (0.014 AC)**
				Total Permanent Impact (Stream and Wetland)	**0.179**

39. Describe measures taken to avoid and minimize impacts to Waters of the United States

Silicon Ranch initially submitted a permit application in December 2021 for a proposed design that resulted in 123 acres of impacts to wetlands through either permanent fill for access roads or clearing and grubbing. Silicon Ranch Corporation considered comments received in response to the public notice and revised the design to avoid most impacts to wetlands and waters of the U.S. The ground coverage ratio was increased from 40% to 45%, which means the rows of panels are spaced closer together. Using this increased ratio allows Silicon Ranch Corporation to meet the power generation requirements of their power purchase agreements with Santee Cooper in the upland portions of the site, with minimal impacts associated with solar panel construction and culvert replacements and improvements. Based on the current design, mechanical clearing and grubbing is no longer proposed within wetlands. No grading in wetlands is proposed. Solar panels will no longer be placed over wetlands and would not result in shading impacts.

40. Provide a brief description of the proposed mitigation plan to compensate for impacts to aquatic resources or provide justification as to why mitigation should not be required

SRC has developed a compensatory mitigation plan for anticipated unavoidable impacts to wetlands and waters of the U.S. from the proposed SR Lambert I and II solar project. The mitigation plan has been developed in accordance with the 2008 USACE Mitigation Rule (33 CFR §332.3) and the USACE Charleston District *Guidelines for Compensatory Mitigation*. The proposed impacts would occur in the Carolina Coastal-Sampit (Hydrologic Unit Code [HUC] 03040207) watershed. SRC proposes to purchase available compensatory mitigation credits from an approved wetland and stream mitigation bank to offset unavoidable permanent impacts to wetlands and waters of the U.S. The project is anticipated to require approximately 1.419 freshwater wetland credits and 145 freshwater stream credits. Mitigation credit worksheets and low-gradient stream assessment forms are included in Attachment C.

NWP General and Regional Conditions

2021 Nationwide Permit General Conditions

1	Navigation	No effect
2	Aquatic Life Movements	Aquatic life movement is limited in non-wetland waters that are channelized and low flow. Flow will be maintained during the project and all efforts will be made to minimize impacts to aquatic life. Appropriately-sized culverts will be used on non-wetland water crossings.
3	Spawning Areas	No effect
4	Migratory Bird Breeding Areas	No effect
5	Shellfish Beds	No effect
6	Suitable Material	Material used for construction will be appropriate for their applications and will be considered suitable material.
7	Water Supply Intakes	The project is not near any water supply intakes.
8	Adverse Effects from Impoundments	No effect
9	Management of Water Flows	A hydrology report has been prepared for the project. Most of the existing onsite ditch network will remain intact. Pre-construction capacity of water flows and stormwater management would be maintained.
10	Fills Within 100-Year Floodplains	No fills are proposed in 100-year floodplains
11	Equipment	If required, heavy equipment working in wetlands will be placed on mats, or other measures must be taken to minimize soil disturbance.
12	Soil Erosion and Sediment Controls	Soil and erosion plans will be put in place to protect waters of the U.S. from sedimentation. SRC will apply for and obtain National Pollutant Discharge Elimination System (NPDES) permits prior to commencing work.
13	Removal of Temporary Structures and Fills	Temporary fills are not expected in this project.
14	Proper Maintenance	The site structures will be properly maintained in accordance with applicable NWP conditions.
15	Single and Complete Project	The proposed project, Lambert I, is associated with SR Lambert I, LLC and a separate power purchase agreement with Santee Cooper.

16	Wild and Scenic Rivers	No effect
17	Tribal Rights	The project is not located on tribal land or in proximity to protected tribal resources.
18	Endangered Species	Section 7 consultation with U.S. Fish and Wildlife Service (USFWS) has been completed. See concurrence in Appendix D. To the extent possible, the proposed project would minimize effects on NLEB by conducting the remaining tree clearing in mapped suitable roosting habitat during the inactive season (November 15th to March 31st).
19	Migratory Birds and Bald and Golden Eagles	Potential impacts to migratory birds would be minimized by conducting tree clearing between November 15th to March 31st. SRC will conduct a pre-construction survey for bald eagles and their nests prior to construction. If a nest is identified within 660-feet of the project site, HDR will notify USFWS and follow the USFWS's National Bald Eagle Management Guidelines.
20	Historic Properties	Attachment D includes correspondence from SCDAH. Impacts to historic properties are not anticipated as a result of the proposed project.
21	Discovery of Previously Unknown Remains and Artifacts	SRC and their contractors will adhere to this condition and immediately notify the USACE District Engineer if previously unknown historic, cultural or archeological remains and artifacts are discovered during construction. SRC to the maximum extent practicable, will avoid construction activities that may affect the remains and artifacts until the required coordination has been completed.
22	Designated Critical Resource Waters	No effect
23	Mitigation	SRC will obtain credits from an available wetland and/or stream mitigation bank that services the project area. Compensatory mitigation worksheets are in Attachment C.
24	Safety of Impoundment Structures	Not applicable
25	Water Quality	SCDHEC has issued a water quality certification for Nationwide Permit 51 with conditions. The proposed project meets these conditions.
26	Coastal Zone Management	This project is located in Georgetown County, which is one of the eight coastal counties regulated under the South Carolina Coastal Zone Management Act. The applicant is applying for an Individual Coastal Zone Consistency for Nationwide Permit 51 from SCDHEC-OCRM.
27	Regional and Case-by-Case Conditions	This activity meets the Regional Conditions for South Carolina as listed below.

28	Use of Multiple Nationwide Permits	Use of multiple nationwide permits is not anticipated.
29	Transfer of Nationwide Permit Verifications	While not expected, SRC would adhere to this condition if the property is sold.
30	Compliance Certification	A signed certification documenting completion of the authorized activity will be provided to USACE.
31	Activities Affecting Structures or Works Built by the United States	Not applicable

Final Regional Conditions for the 2021 Nationwide Permits in Charleston District[2]

For All Nationwide Permits

1. Use of nationwide permits does not preclude requirements to obtain all other applicable Federal, State, county, and local government authorizations.

2. NWP activities are not authorized in areas known or suspected to have sediment contamination, with the exception of the following: (1) activities authorized by NWP 38; (2) activities authorized by NWP 53 when used in combination with NWP 38; (3) sediment sampling for dredging projects authorized by NWP 6; and (4) activities authorized by NWP 20.

   Not applicable to proposed project.

3. For all proposed activities, both temporary and permanent, that would be located within a FEMA designated floodway, the prospective permittee must submit a PCN to the District Engineer in accordance with General Condition 32.

   Not applicable to proposed project.

4. For all NWPs, the prospective permittee must submit a PCN to the District Engineer in accordance with General Conditions 31 and 32, for any activity that would be located in or adjacent to an authorized USACE Civil Works project, including Federal Navigation projects.

   Not applicable to proposed project.

5. For all proposed activities that would be located in or adjacent to an authorized Federal Navigation project, as referenced in Regional Condition C.4.b, the project drawings must include the following information: (1) State Plane Coordinates (NAD 1983) for a minimum of two corners of each structure or fill where it is closest to the Federal channel; (2) the distance from the

[2] Department of the Army Letterhead

watermost edge of the proposed structure or fill to the nearest edge of the Federal channel; and (3) Mean Low Water line and the Mean High Water line.

Not applicable to proposed project.

6. For all NWPs requiring a PCN and when the activity involves the discharge of dredged or fill material into waters of the U.S. associated with mechanized land clearing that results in the permanent conversion of forested or scrub-shrub wetlands to herbaceous wetlands, the PCN should include the following information: (1) a written description and/or drawings of the proposed conversion activity and (2) acreage of the permanent conversion.

   Permanent conversion of wetlands to herbaceous wetlands is not proposed.

Regional Conditions Applicable to Specific NWPs

For NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 in accordance with General Condition 22(a) and for NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38 and 54, in accordance with General Condition 22(b), the ACE Basin National Estuarine Research Reserve and the North Inlet Winyah Bay National Estuarine Research Reserve are Designated Critical Resource Waters. Activities described in the NWPs listed herein are subject to the limitations and/or PCN requirements listed in General Condition 22 (a) and (b).

Not applicable to proposed project.

For NWPs 12, 14, 29, 39, 46, 51, 52, 57 and 58 activities that involve crossings, all culverts must be adequately sized to maintain flow. For these activities that require submittal of a PCN, the PCN should include the minimum size of and number of culvert/pipes that are proposed.

Size of pipes/culverts will be determined by Silicon Ranch's EPC contractor for any crossings of non-wetland waters.

For NWPs 12, 14, 18, 43, 51, 57 and 58, the prospective permittee must submit a PCN to the District Engineer in accordance with General Condition #32, for activities that involve the loss of greater than 0.005 acre of stream bed.

A PCN is enclosed.

For NWPs 12, 14, 18, 21, 29, 39, 40, 42, 43, 44, 50, 51, 52, 57, 58 and 59, activities that involve the loss of greater than 0.005 acre of stream bed, compensatory mitigation will be required and the PCN should include a compensatory mitigation plan.

A PCN is enclosed and includes compensatory mitigation.

For NWPs 12, 14, 18, 21, 27, 29, 39, 40, 42, 43, 44, 50, 51, 52, 57, 58, and 59, the discharge cannot cause the loss of greater than 0.05 acre of stream bed.

The proposed project meets this condition. A discharge of 0.014 acre of non-wetland waters is anticipated for access road crossings or culvert improvements.

Joint Federal and State Application Form
For Activities Affecting Waters of the United States
Or Critical Areas of the State of South Carolina

This Space for Official Use Only
Application No._____
Date Received_____
Project Manager_____
Watershed # _____

Authorities: 33 USC 401, 33 USC 403, 33 USC 407, 33 USC 408, 33 USC 1341, 33 USC 1344, 33 USC 1413 and Section 48-39-10 et. Seq of the South Carolina Code of Laws. These laws require permits for activities in, or affecting, navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. The Corps of Engineers and the State of South Carolina have established a joint application process for activities requiring both Federal and State review or approval. Under this joint process, you may use this form, together with the required drawings and supporting information, to apply for both the Federal and/or State permit(s).

Drawings and Supplemental Information Requirements: In addition to the information on this form, you must submit a set of drawings and, in some cases, additional information. A completed application form together with all required drawings and supplemental information is required before an application can be considered complete. See the attached instruction sheets for details regarding these requirements. You may attach additional sheets if necessary to provide complete information.

1. Applicant Last Name: Echols		11. Agent Last Name (agent is not required): Wade	
2. Applicant First Name: Connor		12. Agent First Name: Blair	
3. Applicant Company Name: Silicon Ranch Corporation		13. Agent Company Name: HDR Engineering, Inc.	
4. Applicant Mailing Address: 222 Second Avenue South, Suite 1900		14. Agent Mailing Address: 4400 Leeds Avenue, Suite 450	
5. Applicant City: Nashville		15. Agent City: North Charleston	
6. Applicant State: TN	7. Applicant Zip: 37201	16. Agent State: SC	17. Agent Zip: 29405
8. Applicant Area Code and Phone No.: 629-202-4021		18. Agent Area Code and Phone No.: 843-414-3740	
9. Applicant Fax No.: n/a		19. Agent Fax No.: n/a	
10. Applicant E-mail: Connor.Echols@siliconranch.com		20. Agent E-mail: Blair.Wade@hdrinc.com	

21. Project Name: SR Lambert I Solar		22. Project Street Address:	
23. Project City: Lambert	24. Project County: Georgetown	25. Project Zip Code: 29440	26. Nearest Waterbody: Sampit
27. Tax Parcel ID: 01-1006-006-00-00		28. Property Size (acres): 1071	
29. Latitude: 33.33563°		30. Longitude: -79.528727°	

31. Directions to Project Site (Include Street Numbers, Street Names, and Landmarks and attach additional sheet if necessary):
The Project is located on land currently owned by RMS, a timber management company. The site is bound to the north by Alt. US 17 (Saints Delight Road), to the east by Wild Horse Road, to the south by County Road S-22-387, and to the west by Windum Drive.

32. Description of the Overall Project and of Each Activity in or Affecting U.S. Waters or State Critical Areas (attach additional sheets if needed)
See supplemental information.

33. Overall Project Purpose and the Basic Purpose of Each Activity In or Affecting U.S. Waters (attach additional sheets if needed):
See supplemental information.

34. Type and quantity of Materials to Be Discharged

Dirt or Topsoil:	15,600	■ cubic yards
Clean Sand:		☐ cubic yards
Mud:		☐ cubic yards
Clay:		☐ cubic yards
Gravel, Rock, or Stone:		☐ cubic yards
Concrete:		☐ cubic yards
Other (describe):		☐ cubic yards
TOTAL:	15,600	cubic yards

35. Type and Quantity of Impacts to U.S. Waters (including wetlands).

Filling:	0.179	■ acres	☐ sq.ft.	15,600	■ cubic yards
Backfill & Bedding:		☐ acres	☐ sq.ft		☐ cubic yards
Landclearing:		☐ acres	☐ sq.ft		☐ cubic yards
Dredging:		☐ acres	☐ sq.ft.		☐ cubic yards
Flooding:		☐ acres	☐ sq.ft.		☐ cubic yards
Draining/Excavation:		☐ acres	☐ sq.ft.		☐ cubic yards
Shading:		☐ acres	☐ sq.ft.		☐ cubic yards
TOTALS:	0.179	acres		sq.ft. 15,600	cubic yards

Estimated based on 0.179 acres of impact and 2' of fill and backfill.

36. Individually list wetland impacts including mechanized clearing, fill, excavation, flooding, draining, shading, etc. and attach a site map with location of each impact (attach additional sheets if needed).

Impact No.	Wetland Type	Distance to Receiving Water body (LF)	Purpose of Impact (road crossing, impoundment, flooding, etc)	Impact Size (acres)
See Supplemental Information				
			Total Wetland Impacts (acres)	See supplemental information.

37. Individually list all seasonal and perennial stream impacts and attach a site map with location of each impact (attach additional sheets)

Impact No.	Seasonal or Perennial Flow	Average Stream Width (LF)	Impact Type (road crossing, impoundment, flooding, etc)	Impact Length (LF)
See Supplemental Information				
			Total Stream Impacts (Linear Feet)	See supplemental information

38. Have you commenced work on the project site? ☐ YES ■ NO If yes, describe all work that has occurred and provide dates.

39. Describe measures taken to avoid and minimize impacts to Waters of the United States:

See supplemental information.

40. Provide a brief description of the proposed mitigation plan to compensate for impacts to aquatic resources or provide justification as to why mitigation should not be required (Attach a copy of the proposed mitigation plan for review).

See supplemental information and Attachment F.

41. See the attached sheet to list the names and addresses of adjacent property owners.

See Map in Attachment A and table of addresses in Attachment B. HDR can assist in printing address labels for the public notice at the USACE's request.

42. List all Corps Permit Authorizations and other Federal , State, or Local Certifications, Approvals, Denials received for work described in this application.

None received to date; SCDHEC 401 Water Quality Certification, OCRM Coastal Zone Consistency Determination, and SCDHEC/Georgetown County NOI being applied for.

43. Authorization of Agent. I hereby authorize the agent whose name is given on page one of this application to act in my behalf in the processing of this application and to furnish supplemental information in support of this application. [1]

Applicant's Signature Date

44. Certification. Application is hereby made for a permit or permits to authorize the work and uses of the work as described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized a[illegible]

EBGwade 5/25/2022

Applicant's Signature Date Agent's Signature Date

[1]The application must be signed by the person who desires to undertake the proposed activity or it may be signed by a duly authorized agent if the authorization statement in blocks 11 and 43 have been completed and signed. 18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

#41- Adjacent Property Owner Mailing List

NOTE: A depiction of the adjacent properties with identifying corresponding property owner names must accompany this mailing list.
(Attach additional sheets if necessary)

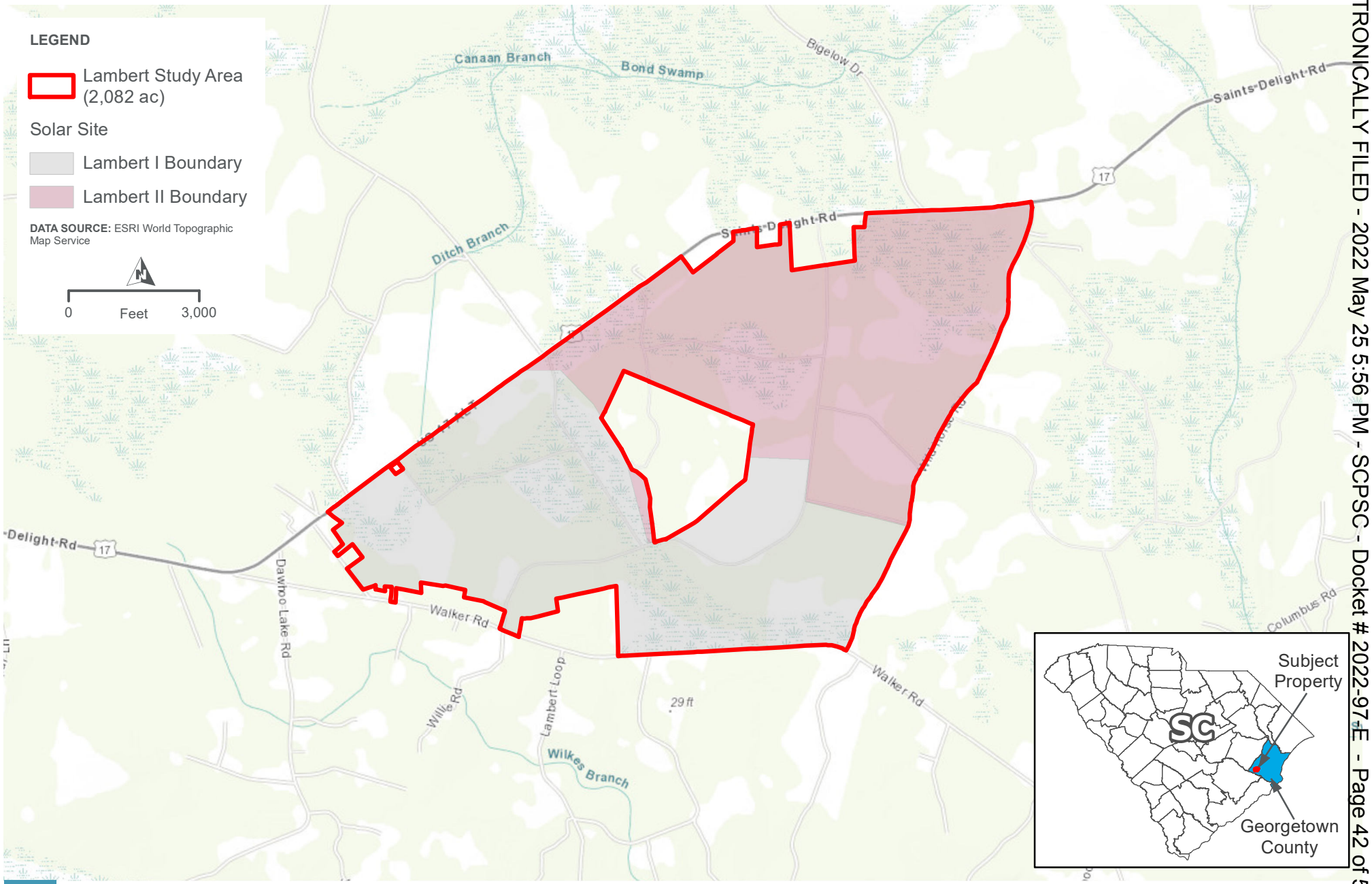
Applicant Name: Silicon Ranch Corporation

Project Name: SR Lambert I and II

Property Owner Name	Mailing Address
	See Parcel Map in Attachment A and address table in Attachment B. HDR can provide printed address labels for the public notice at USACE's request.

Attachment A

Figures and Permit Drawings



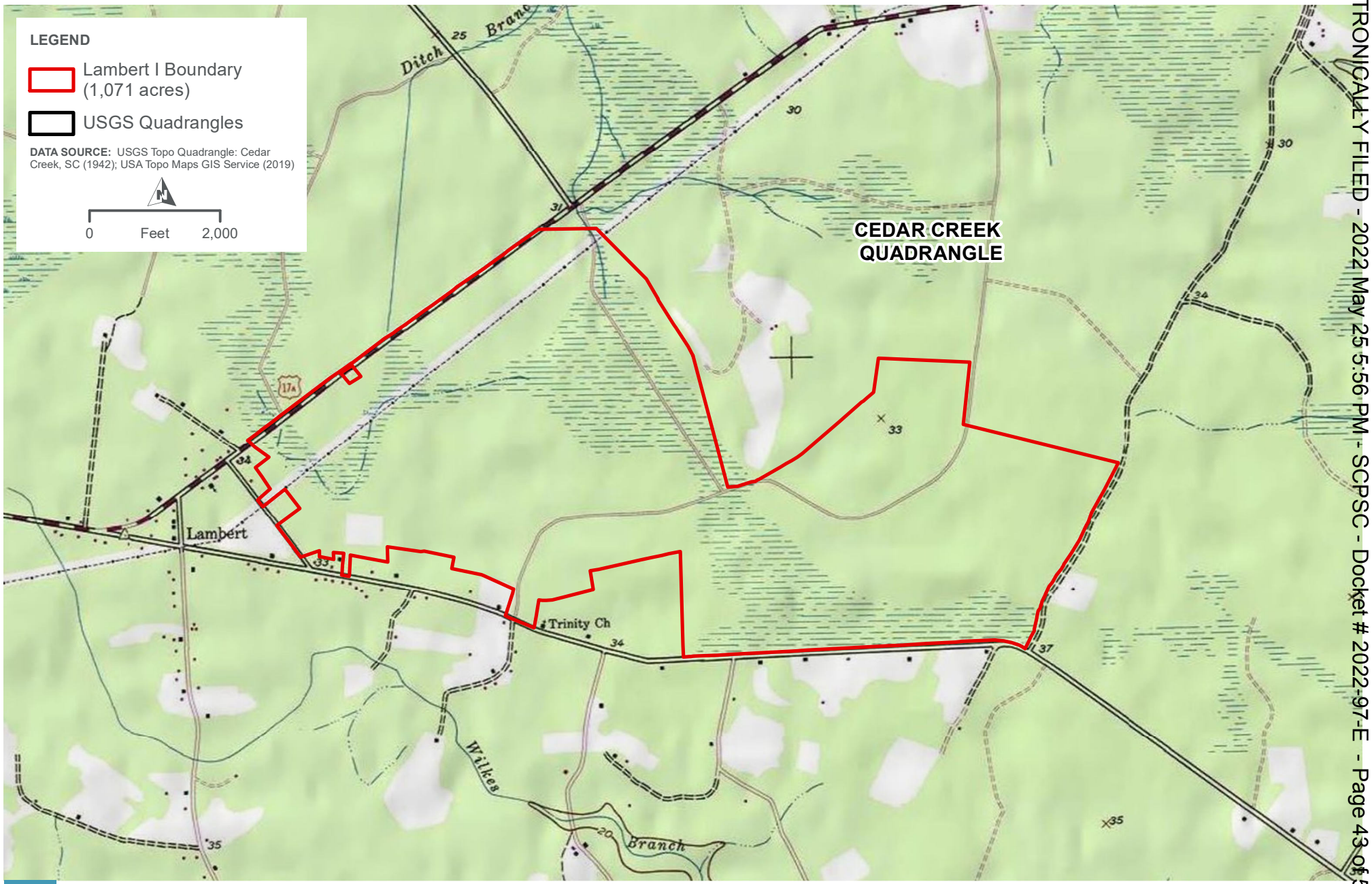
SILICON RANCH

SR LAMBERT I

PROJECT VICINITY

FIGURE 1

PATH: \\CLTSMAIN\GIS_DATA\GIS\PROJECTS\10532_SILICONRANCHCORPORATION\10172411_LAMBERT\7.2_WIP\MAP_DOCS\MXD\NATIONWIDE_PERMITS\LAMBERT_I\01_LAMBERTI_LOCATION.MXD - USER: GMARCHICA - DATE: 5/20/2022



SILICON RANCH

SR LAMBERT I

USGS TOPOGRAPHIC QUADRANGLES

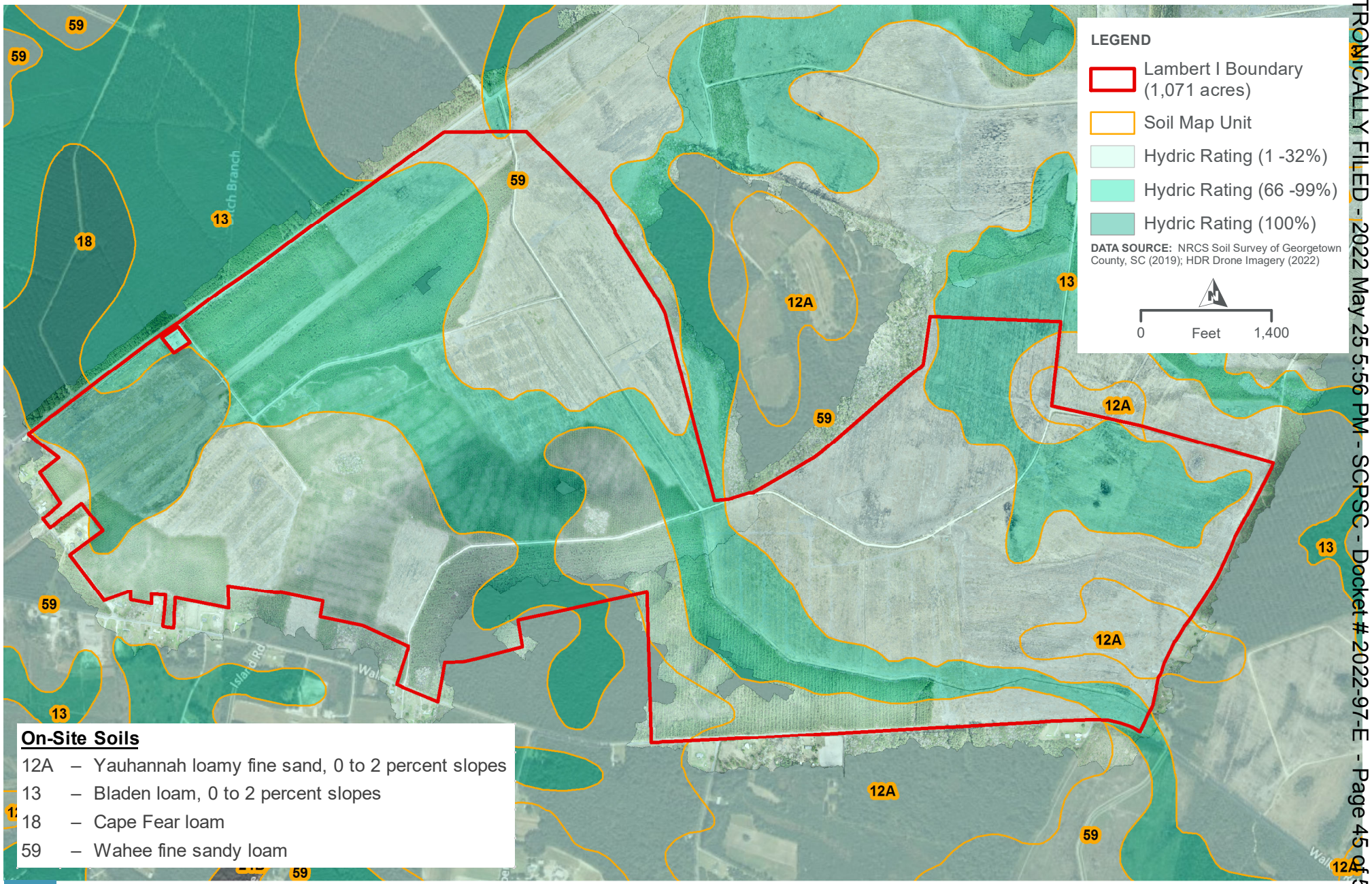
FIGURE 2

HDR SILICON RANCH

SR LAMBERT I

AERIAL IMAGERY

FIGURE 3



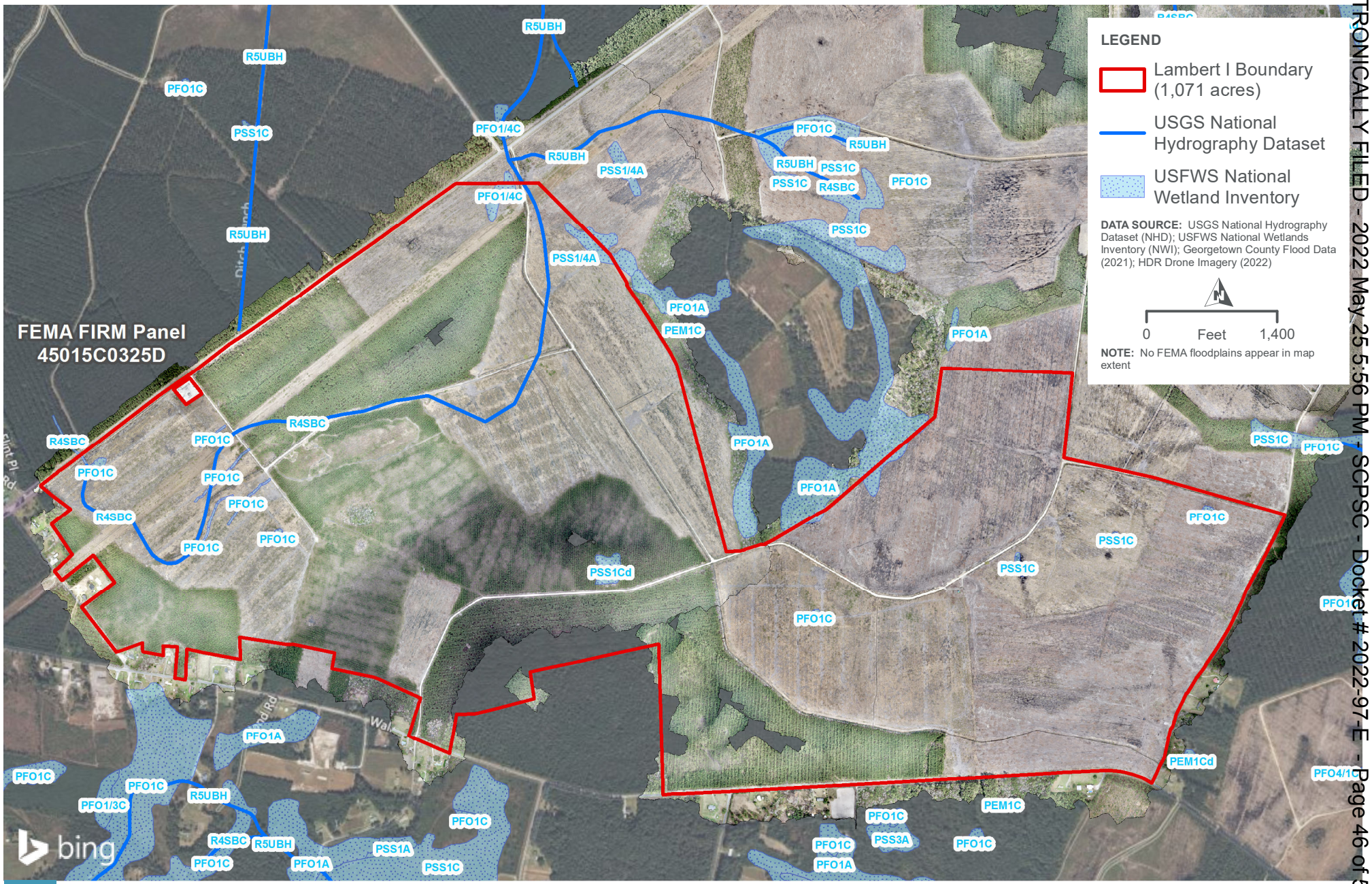
SILICON RANCH

SR LAMBERT I

NRCS SOILS SURVEY OF GEORGETOWN COUNTY, SC

FIGURE 4

PATH: \\CLTSMAIN\GIS_DATA\GIS\PROJECTS\10532_SILICONRANCHCORPORATION\10172411_LAMBERT\7.2_WIP\MAP_DOCS\MXD\NATIONWIDE_PERMITS\LAMBERT_I\04_LAMBERTI_SOILS.MXD - USER: GMARCHICA - DATE: 5/25/2022

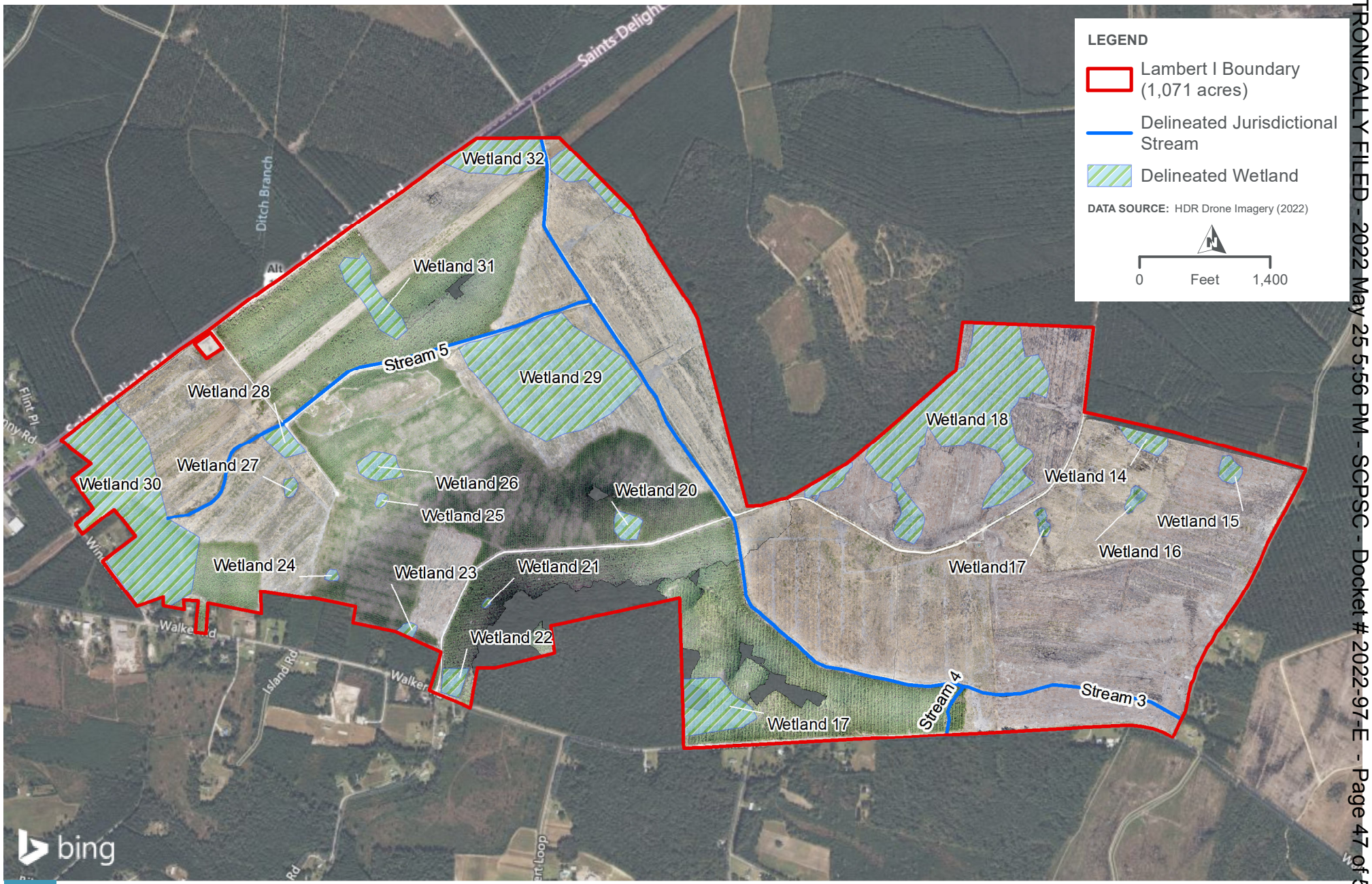


SR LAMBERT I

NHD, NWI, AND FEMA FLOODPLAINS

FIGURE 5

PATH: \\CLTSMAIN\GIS_DATA\GIS\PROJECTS\10532_SILICONRANCHCORPORATION\10172411_LAMBERT\7.2_WIP\MAP_DOCS\MXD\NATIONWIDE_PERMITS\LAMBERT_I\05_LAMBERTI_FLOOD.MXD - USER: GMARCHICA - DATE: 5/25/2022



SILICON RANCH

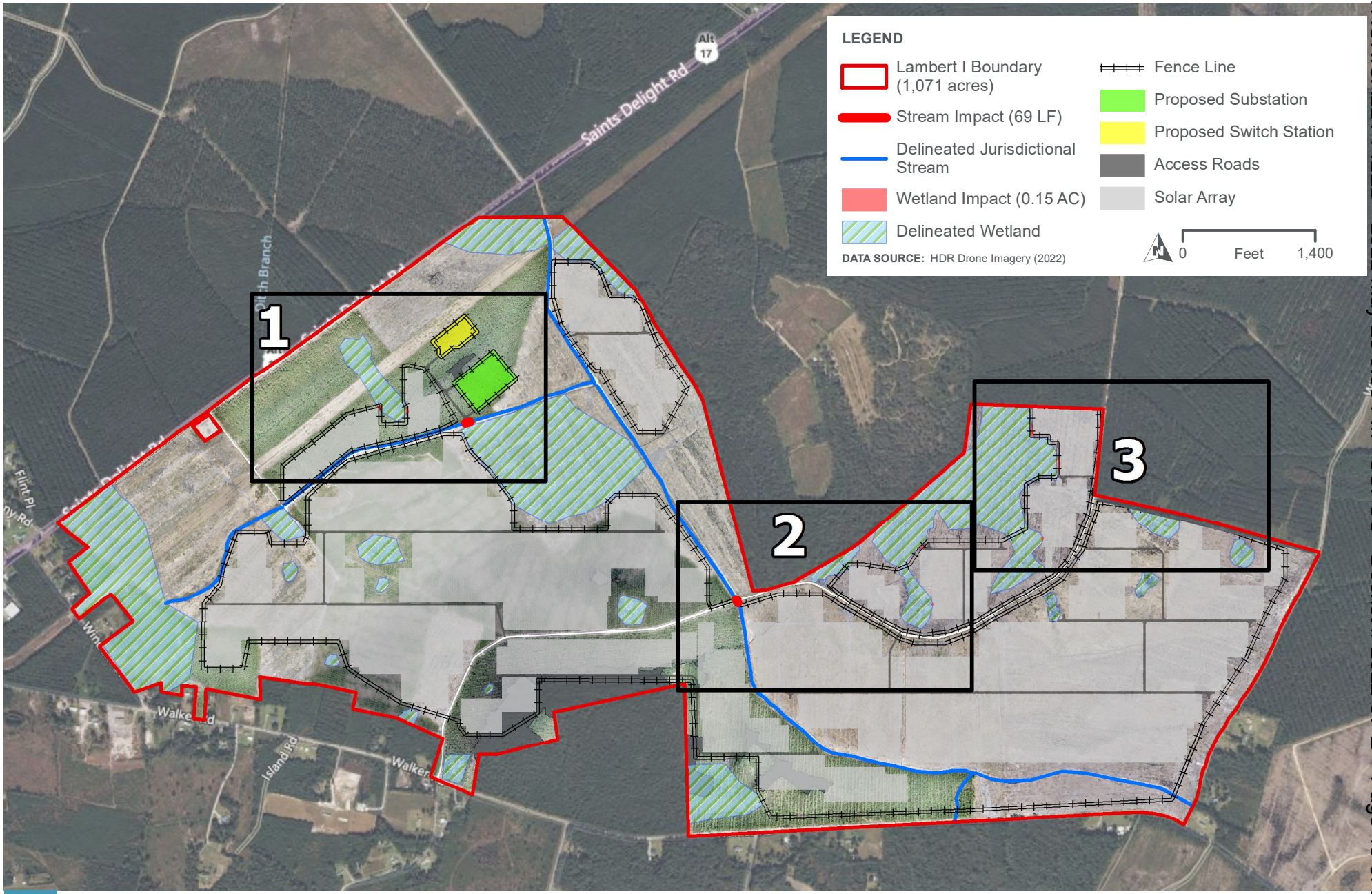
SR LAMBERT I

DELINEATED FEATURES

FIGURE 6

PATH: \\CLTSMAIN\GIS_DATA\GIS\PROJECTS\10532_SILICONRANCHCORPORATION\10172411_LAMBERT\7.2_WIP\MAP_DOCS\MXD\NATIONWIDE_PERMITS\LAMBERT_I\06_LAMBERTI_DELINEATEDFEATURES.MXD - USER: GMARCHICA - DATE: 5/25/2022

NATIONWIDE PERMIT APPLICATION



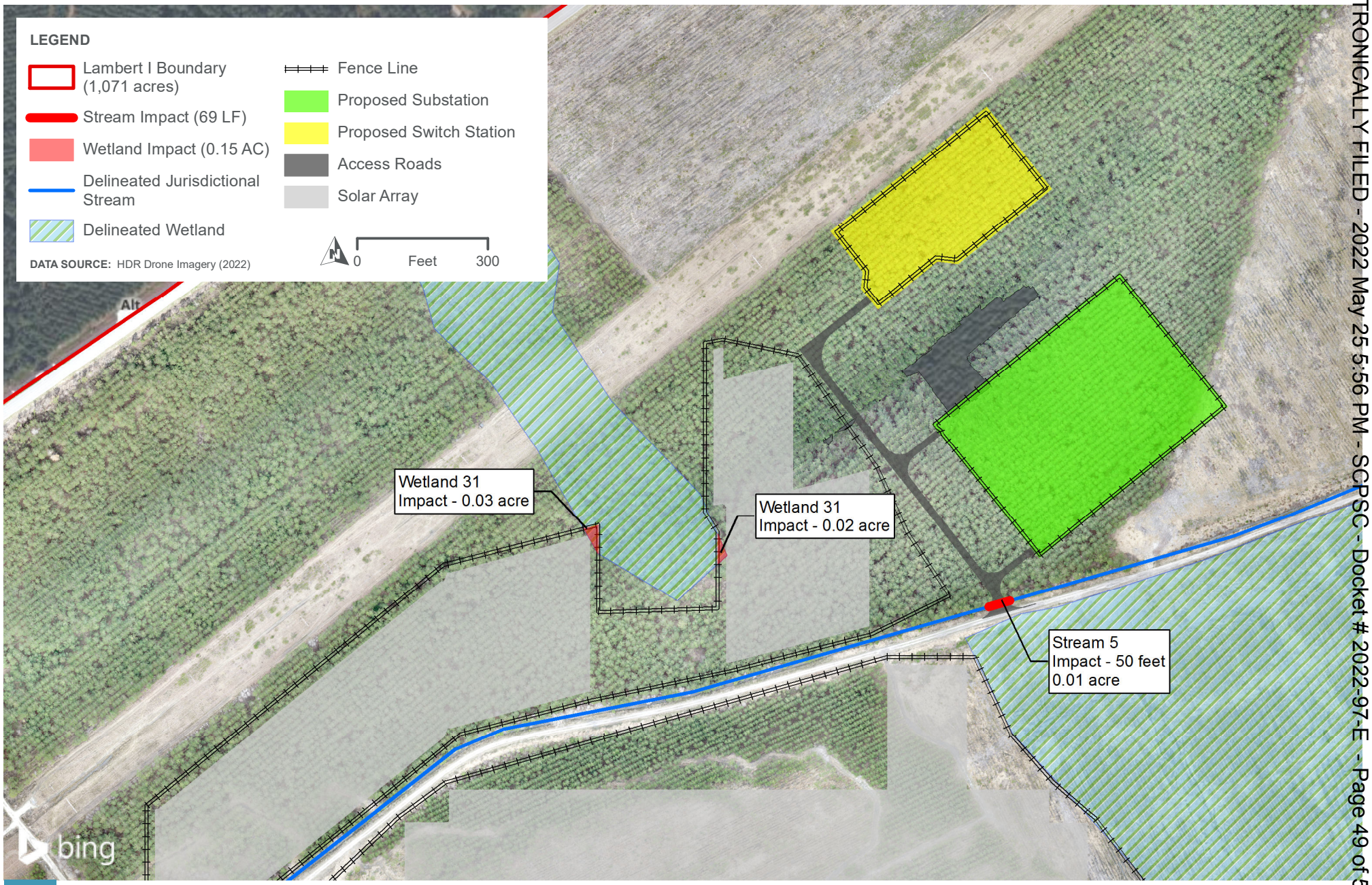
SILICON RANCH

SR LAMBERT I

SOLAR LAYOUT IMPACTS - OVERVIEW

FIGURE 7

PATH: \\CLTSMAIN\GIS_DATA\GIS\PROJECTS\10532_SILICONRANCHCORPORATION\10172411_LAMBERT\7.2_WIP\MAP_DOCS\MXD\NATIONWIDE_PERMITS\LAMBERT_I\07.0_LAMBERTI_IMPACTS_OVERVIEW.MXD - USER: GMARCHICA - DATE: 5/25/2022



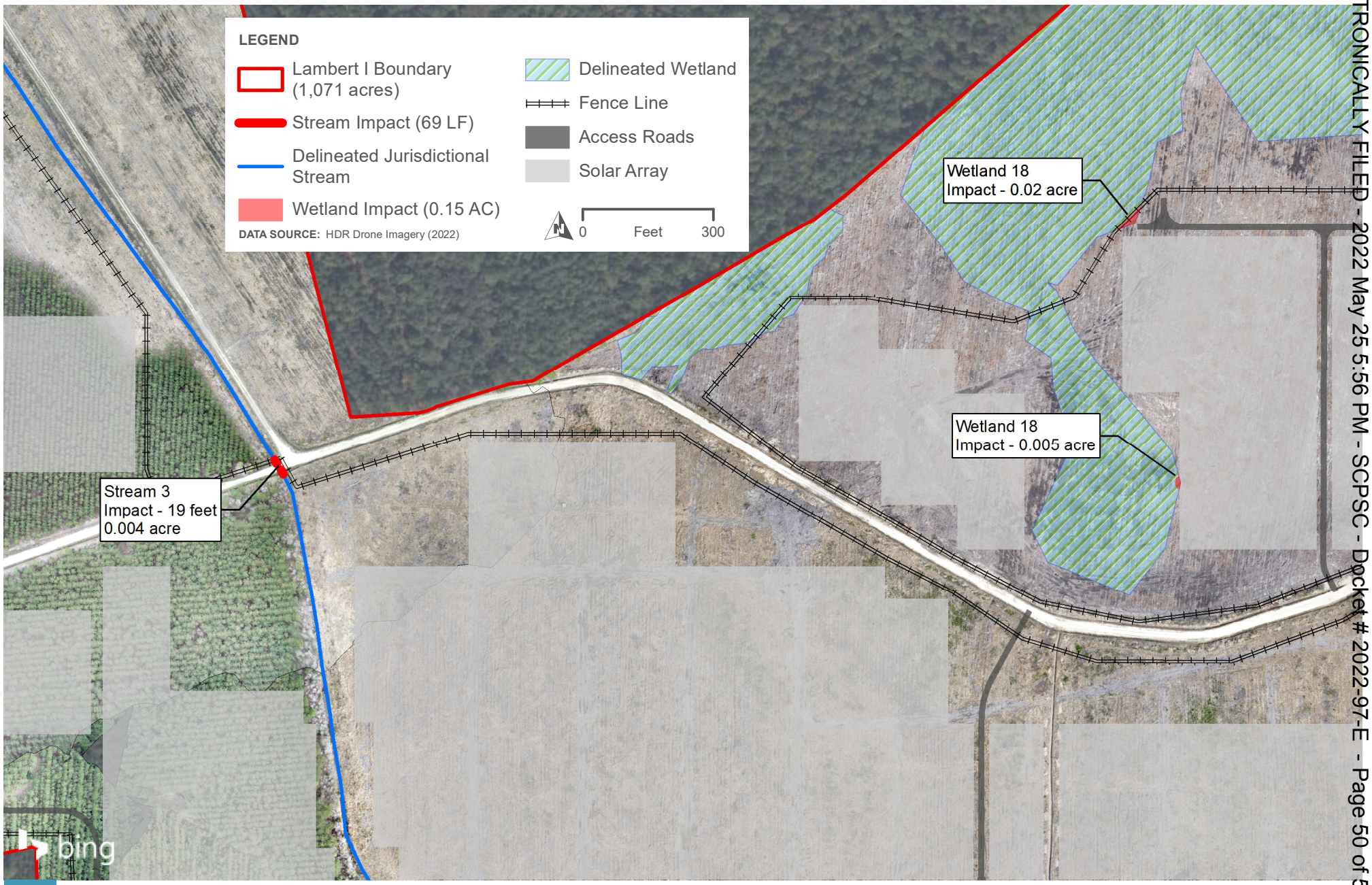
SR LAMBERT I

SOLAR LAYOUT IMPACTS

FIGURE 7 - PAGE 1 OF 3

NATIONWIDE PERMIT APPLICATION

PATH: \\CLTSMAIN\GIS_DATA\GIS\PROJECTS\10532_SILICONRANCHCORPORATION\10172411_LAMBERT\7.2_WIP\MAP_DOCS\MXD\NATIONWIDE_PERMITS\LAMBERT_I\07.1_LAMBERTI_IMPACTS.MXD - USER: GMARCHICA - DATE: 5/25/2022

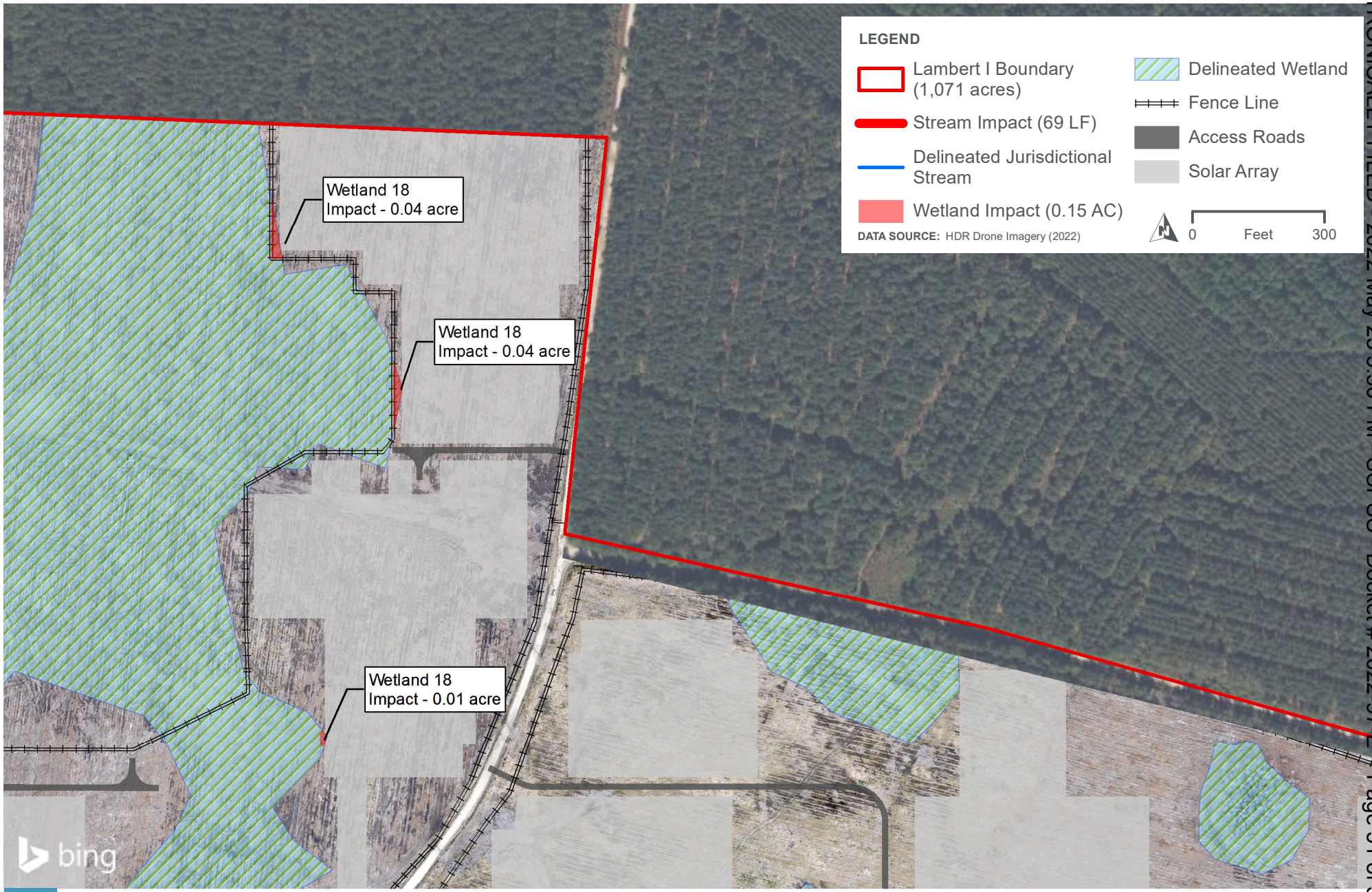


HDR SILICON RANCH

SR LAMBERT I

SOLAR LAYOUT IMPACTS

FIGURE 7 - PAGE 2 OF 3



SILICON RANCH

SR LAMBERT I

SOLAR LAYOUT IMPACTS

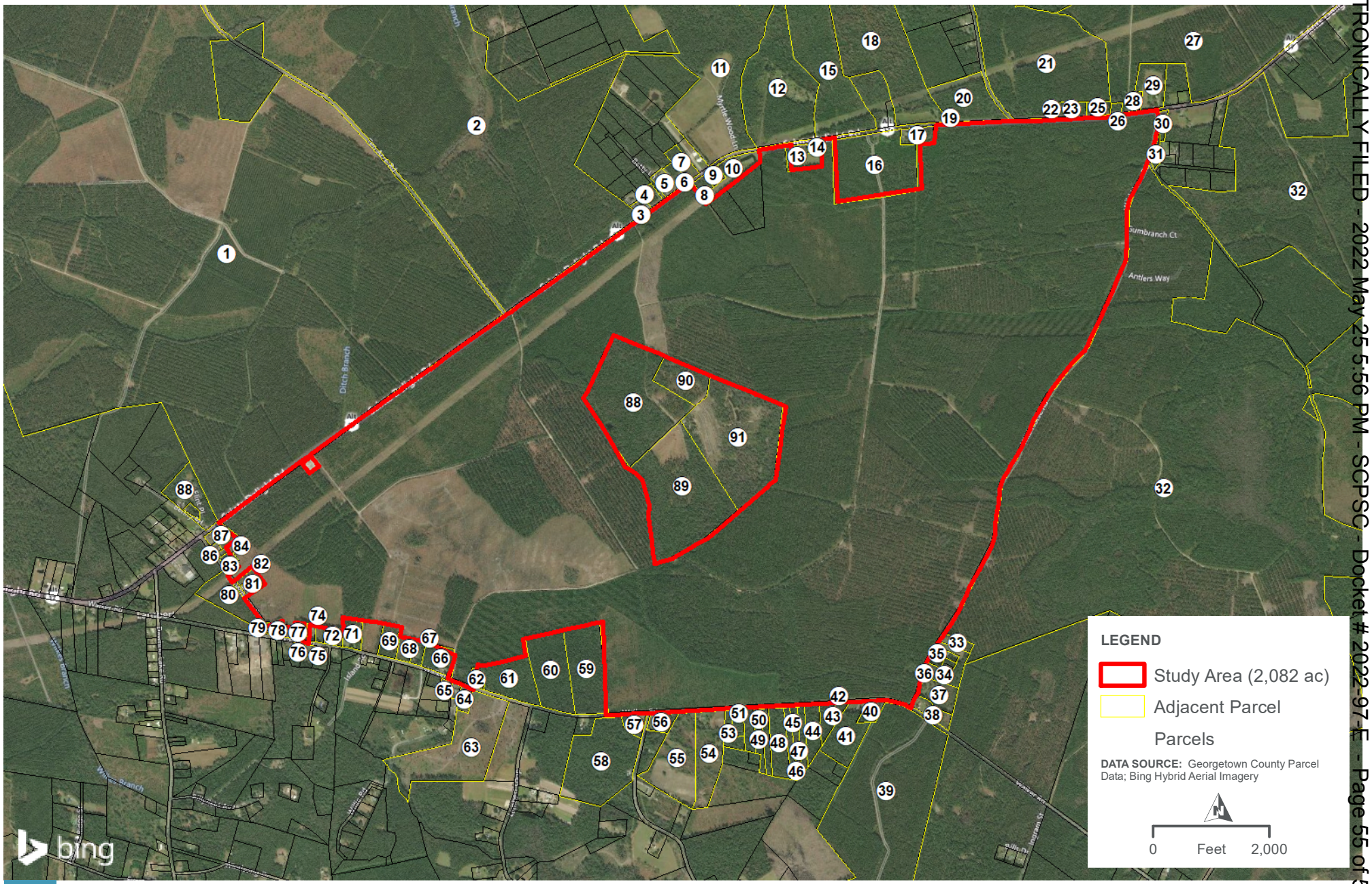
FIGURE 7 - PAGE 3 OF 3

Attachment B

Adjacent Property Owners

Map_No	TMS	ParcelID	StreetNumb	StreetName	Owner1	Owner2	BillingAdd	BillingA_1	City	State	ZipCode	LandUseCod
1	01-0442-026-11-00	01-0442-026-11-00		UNKNOWN	JAMESTOWN TIMBER 1, LP		C/O PROPERTY TAX ADMIN	P O BOX 3349	ALBANY	GA	31706-3349	Q302
2	01-0442-026-11-00	01-0442-026-11-00		UNKNOWN	JAMESTOWN TIMBER 1, LP		C/O PROPERTY TAX ADMIN	P O BOX 3349	ALBANY	GA	31706-3349	Q302
3	01-0423-003-00-00	01-0423-003-00-00	6388	ST DELIGHT RD	NEWTON BERTIE M LIFE ESTATE		6388 SAINT DELIGHT RD		GEORGETOWN	SC	29440	Q200
4	01-0423-004-00-00	01-0423-004-00-00	6322	ST DELIGHT RD	EVANS MICHAEL THOMAS		1951 GEORGETOWN HIGHWAY		GEORGETOWN	SC	29440	N200
5	01-0423-023-03-00	01-0423-023-03-00	6278	ST DELIGHT RD	BLAKE BONNIE M		1012 OAKLEY ST		GEORGETOWN	SC	29440	N200
6	01-0423-005-00-00	01-0423-005-00-00	6222	ST DELIGHT RD	SOBIESK ERIC J		6222 SAINT DELIGHT ROAD		GEORGETOWN	SC	29440	N065
7	01-0424-001-01-00	01-0424-001-01-00	6117	ST DELIGHT RD	BLAKE THOMAS PHILLIP		425 PRESS LINDLER RD		COLUMBIA	SC	29212	Q202
8	01-0424-001-02-00	01-0424-001-02-00		ST DELIGHT RD	CUSTER EMERY C		623 1ST AVENUE NORTH		SURFSIDE BEACH	SC	29575	N000
9	01-0424-001-02-01	01-0424-001-02-01	6141	ST DELIGHT RD	KELLAHAN KEVIN HEYWARD		6141 ST DELIGHT ROAD		GEORGETOWN	SC	29440	Q165
10	01-0424-001-00-00	01-0424-001-00-00	6061	ST DELIGHT RD	BLAKE DONNIE E		6061 SAINTS DELIGHT RD		GEORGETOWN	SC	29440	Q100
11	01-0424-001-00-00	01-0424-001-00-00	6061	ST DELIGHT RD	BLAKE DONNIE E		6061 SAINTS DELIGHT RD		GEORGETOWN	SC	29440	Q100
12	01-0424-002-05-00	01-0424-002-05-00	5812	ST DELIGHT RD	NELSON WILLIAM L	NELSON BARBARA S	5812 SAINTS DELIGHT RD		GEORGETOWN	SC	29440	N300
13	01-0424-009-00-00	01-0424-009-00-00	5760	ST DELIGHT RD	PINSON JOSEPH HARRISON		5793 SAINTS DELIGHT RD		GEORGETOWN	SC	29440	N200
14	01-0424-010-00-00	01-0424-010-00-00	5793	ST DELIGHT RD	PINSON JOSEPH HARRISON		5793 SAINTS DELIGHT RD		GEORGETOWN	SC	29440	N200
15	01-0424-002-06-00	01-0424-002-06-00	5609	ST DELIGHT RD	TRIANA DAVID A	TRIANA KRISTIN M	153 WILDBERRY LANE		GOOSE CREEK	SC	29445	Q302
16	01-0442-026-08-00	01-0442-026-08-00		SAINT DELIGHTS RD	WEYERHAEUSER NR COMPANY		ATTN: TAX DEPARTMENT	100 PROFESSIONAL CENTER DR	BRUNSWICK	GA	31525	N302
17	01-0424-002-03-00	01-0424-002-03-00	5473	ST DELIGHT RD	MERCER CHRISTOPHER J	MERCER BRITTANY N	5473 SAINTS DELIGHT ROAD		GEORGETOWN	SC	29440	Q200
18	01-0424-002-00-00	01-0424-002-00-00	5551	ST DELIGHT RD	WILLARD WILLIAM D		PO BOX 411		MURRELLS INLET	SC	29576	Q302
19	01-0424-002-02-00	01-0424-002-02-00	5340	ST DELIGHT RD	GIBSON LISTON E		139 CROOKED ISLAND CIR		MURRELLS INLET	SC	29576	N200
20	01-0424-002-04-00	01-0424-002-04-00	5185	ST DELIGHT RD	GIBSON LISTON E	GIBSON KAY S	1351 COUNTY RD		WAYNESILLE	NC	28785	N300
21	01-0424-003-00-00	01-0424-003-00-00		ST DELIGHT RD	GLADSON JUDITH H		505 10TH AVENUE		CONWAY	SC	29526	Q302
22	01-0424-003-03-00	01-0424-003-03-00	4905	ST DELIGHT RD	RHUE FELIX H		875 KENT RD		GEORGETOWN	SC	29440	N200
23	01-0424-003-02-00	01-0424-003-02-00	4873	ST DELIGHT RD	TURNER MICHAEL W		95 SNOWBELL LANE		PAWLEYS ISLAND	SC	29585	N200
24	01-0424-003-01-00	01-0424-003-01-00	4837	ST DELIGHT RD	TURNER MICHAEL W		95 SNOWBELL LANE		PAWLEYS ISLAND	SC	29585	N200
25	01-0424-006-00-00	01-0424-006-00-00	4850	ST DELIGHT RD	THOMAS JOHN WALLACE	FLETCHER ZOEY	4850 ST DELIGHT RD		GEORGETOWN	SC	29440	Q200
26	01-0424-007-00-00	01-0424-007-00-00	4715	ST DELIGHT RD	THOMPSON STAN		1639 BRICK CHIMNEY ROAD		GEORGETOWN	SC	29440	N100
27	01-0442-026-13-00	01-0442-026-13-00		UNKNOWN	NEW GROWTH LLC		C/O: LARSON & MCGOWIN, LLC	P.O. BOX 1288	MOBILE	AL	36633	N302
28	01-0424-008-02-00	01-0424-008-02-00	4714	ST DELIGHT RD	LATHAN SIMONE R		4714 ST DELIGHT RD		GEORGETOWN	SC	29440	N200
29	01-0424-008-00-00	01-0424-008-00-00	4664	ST DELIGHT RD	SMITH BONNIE R JR	SMITH MARY ALICE P	4664 ST DELIGHT RD		GEORGETOWN	SC	29440	Q300
30	01-0424-011-00-00	01-0424-011-00-00		ST DELIGHT RD	FLOWERS FAMILY FARM LLC		C/O FLOWERS FAMILY FARM LLC	525 WINDSONG POINT LN	COLUMBIA	SC	29212	N200
31	01-0442-026-07-00	01-0442-026-07-00		ST DELIGHT RD	SANTEE TIMBERLANDS LP		9418 HIGHMARKET ST		GEORGETOWN	SC	29440	N302
32	01-0442-026-07-00	01-0442-026-07-00		ST DELIGHT RD	SANTEE TIMBERLANDS LP		9418 HIGHMARKET ST		GEORGETOWN	SC	29440	N302
33	01-0433-002-01-00	01-0433-002-01-00	1899	WILD HORSE RD	LAMBERT AMELIA		1899 WILDHORSE RD		GEORGETOWN	SC	29440	Q200
34	01-0433-002-04-00	01-0433-002-04-00	1899	WILD HORSE RD	LAMBERT SOLON JAMES		1899 WILD HORSE RD		GEORGETOWN	SC	29440	N300
35	01-0433-002-03-00	01-0433-002-03-00	1941	WILD HORSE RD	LAMBERT AMELIA E		1899 WILD HORSE RD		GEORGETOWN	SC	29440	Q065
36	01-0433-002-05-00	01-0433-002-05-00	1989	WILD HORSE RD	LAMBERT AMELIA E		1899 WILD HORSE RD.		GEORGETOWN	SC	29442	N200
37	01-0441-021-00-00	01-0441-021-00-00	2069	WILD HORSE RD	BRYANT RICHARD KIRKLAND JR		2069 WILDHORSE RD		GEORGETOWN	SC	29442	Q100
38	01-0441-022-00-00	01-0441-022-00-00	4978	WALKER RD	BURR CHARLES CASEY	BURR LINDA L	4978 WALKER RD		GEORGETOWN	SC	29440	Q065
39	01-0442-026-10-00	01-0442-026-10-00		UNKNOWN	RHODES FOREST LLC		C/O W MCLEOD RHODES	1820 SAVANNAH HWY	CHARLESTON	SC	29407	Q302
40	01-0441-005-01-00	01-0441-005-01-00	5133	WALKER RD	LAMBERT DONNIE LEO		5133 WALKER RD		GEORGETOWN	SC	29440	Q200
41	01-0441-005-00-00	01-0441-005-00-00	5181	WALKER RD	LAMBERT GAIL M		1890 LAMBERT LOOP		GEORGETOWN	SC	29440	Q302
42	01-0441-004-00-00	01-0441-004-00-00	2708	LAMBERT LOOP	DORSEY EMMA		PO BOX 172		ANDREWS	SC	29510	N200
43	01-0441-004-01-00	01-0441-004-01-00		WALKER RD	WILLIAMS SOLOMON M III		110 CASTLEFORD RD		MOORE	SC	29369	N200
44	01-0441-003-00-00	01-0441-003-00-00	2652	LAMBERT LOOP	BROWN JACQUELINE ANDERSON TRUSTEE		103 PRENTICE CIRCLE		GOOSE CREEK	SC	29445	N300
45	01-0441-002-00-00	01-0441-002-00-00	2580	LAMBERT LOOP	WILLIAMS CLIFTON S	WILLIAMS CHRISTEN M	18 STONE GARDEN CT		OWINGS MILLS	MD	21117	N200
46	01-0441-002-02-00	01-0441-002-02-00		WALKER RD	BROWN JACQUELINE ANDERSON TRUSTEE		103 PRENTICE CIRCLE		GOOSE CREEK	SC	29445	N200
47	01-0441-002-01-00	01-0441-002-01-00		WALKER RD	WILLIAMS CLIFTON S ET AL	WILLIAMS CLIFTON B	18 STONE GARDEN CT		OWINGS MILLS	MD	21117	N200
48	01-0441-001-00-00	01-0441-001-00-00		WALKER RD	WILLIAMS TENNYSON ET AL	CHRISTMAS MELLIE	C/O CHRISTMAS MELLIE	P O BOX 708	MONTCLAIR	NJ	07042	N300
49	01-0440-031-00-00	01-0440-031-00-00		WALKER RD	BROWN JACQUELINE ANDERSON TRUSTEE		103 PRENTICE CIRCLE		GOOSE CREEK	SC	29445	N200
50	01-0440-031-02-00	01-0440-031-02-00		WALKER RD	WILLIAMS GLENN ROOSEVELT		12 ESSEN DR		AMITYVILLE	NY	11701	N200
51	01-0440-031-01-00	01-0440-031-01-00		WALKER RD	BROWN JACQUELINE ANDERSON TRUSTEE		103 PRENTICE CIRCLE		GOOSE CREEK	SC	29445	N200
52	01-0440-030-00-00	01-0440-030-00-00		WALKER RD	WILLIAMS JACQUELINE M		6606 BROOKFIELD ROAD		COLUMBIA	SC	29206	N200
53	01-0440-029-00-00	01-0440-029-00-00	5617	WALKER RD	WILLIAMS JACQUELINE M		6606 BROOKFIELD ROAD		COLUMBIA	SC	29206	N200
54	01-0440-028-01-00	01-0440-028-01-00	5681	WALKER RD	LAMBERT FLOYD P LIFE ESTATE		C/O TERRI LAMBERT CLAYTON	703 POINT CIRCLE	SUMMERVILLE	SC	29485	Q100
55	01-0440-028-05-00	01-0440-028-05-00		WALKER RD	LAMBERT FLOYD P LIFE ESTATE		C/O TERRI LAMBERT CLAYTON	703 POINT CIRCLE	SUMMERVILLE	SC	29485	Q302
56	01-0440-028-00-00	01-0440-028-00-00	5779	WALKER RD	VALENTINE CYNTHIA C	BRANDON PEGGY C	5779 WALKER RD		GEORGETOWN	SC	29440	Q200
57	01-0440-025-03-00	01-0440-025-03-00	5891	WALKER RD	LAMBERT IRENE H		5891 WALKER ROAD		GEORGETOWN	SC	29440	Q200
58	01-0440-025-07-00	01-0440-025-07-00	210	LAMBERT LOOP	LAMBERT IRENE H		5891 WALKER ROAD		GEORGETOWN	SC	29440	Q302
59	01-0432-028-00-00	01-0432-028-00-00		WALKER RD	BARNHILL SANDRA L		348 CHEROKEE DR		GEORGETOWN	SC	29440	Q302
60	01-0432-028-01-00	01-0432-028-01-00		WALKER RD	PIATT MARCIA L N/K/A MARCIA LAMBERT MATTHEWS		405 BIRCH STREET		GEORGETOWN	SC	29440	Q302
61	01-0432-027-00-00	01-0432-027-00-00	1387	WALKER RD	GILES EDMOND ET AL	GILES KAREN DOAUD	C/O NAOMI DOTSON	2173 BERNARD WAY	SACRAMENTO	CA	95822	N300
62	01-0432-026-00-00	01-0432-026-00-00	6428	WALKER RD	TRINITY A M E CHURCH		6428 WALKER RD		GEORGETOWN	SC	29440	E890
63	01-0440-025-05-00	01-0440-025-05-00		WALKER RD	WINSTON MCKENZIE RENTALS LLC		638 DAVE MCKENZIE DR		ANDREWS	SC	29510	Q302
64	01-0432-060-00-00	01-0432-060-00-00	6449	WALKER RD	LAMBERT DAWSON ABBOTT		504 SQUIRE RD		ANDREWS	SC	29510	N065
65	01-0432-059-01-00	01-0432-059-01-00		WALKER RD	LAMBERT TONY K	LAMBERT CAROL M	565 WILLIE RD		GEORGETOWN	SC	29440	N000
66	01-0432-025-00-00	01-0432-025-00-00	6556	WALKER RD	LAMBERT DOROTHY D LIFE ESTATE		1152 - 10TH STREET EXT		LANCASTER	SC	29720	Q202

66	01-0432-058-00-00	01-0432-058-00-00	6539	WALKER RD	THOMAS JAMES LEWIS	THOMAS MARGARET MARIE	6539 WALKER RD		GEORGETOWN	SC	29440	Q100
67	01-0432-024-01-00	01-0432-024-01-00	6660	WALKER RD	THOMAS SAMUEL A JR		6660 WALKER ROAD		GEORGETOWN	SC	29440	Q200
68	01-0432-024-00-00	01-0432-024-00-00		WALKER RD	THOMAS MAKAYLA RENEE	THOMAS ALLISON TAYLOR	2537 US HWY 521		ANDREWS	SC	29510	N200
69	01-0432-024-04-00	01-0432-024-04-00		WALKER RD	SIMS BERNARD L		1615 LAMBERT LOOP		GEORGETOWN	SC	29440	Q202
71	01-0432-024-02-00	01-0432-024-02-00	6868	WALKER RD	CUSACK TRACEY D		6868 WALKER RD		GEORGETOWN	SC	29440	Q200
72	01-0432-023-00-00	01-0432-023-00-00	6944	WALKER RD	MCKENZIE JUSTIN KEITH	MCKENZIE JILLIAN PAIGE	6944 WALKER ROAD		GEORGETOWN	SC	29440	Q200
73	01-0432-023-01-00	01-0432-023-01-00	7002	WALKER RD	MCKENZIE JUSTIN KEITH	MCKENZIE JILLIAN PAIGE	6944 WALKER ROAD		GEORGETOWN	SC	29440	N200
74	01-0432-023-01-01	01-0432-023-01-01	7002	WALKER RD	LAMBERT CONNIE L	LAMBERT ROLAND M	7002 WALKER RD		GEORGETOWN	SC	29440	Q200
75	01-0432-051-00-00	01-0432-051-00-00	6991	WALKER RD	LAMBERT TONY KEVIN LIFE EST		6991 WALKER RD		GEORGETOWN	SC	29440	N200
76	01-0432-050-00-00	01-0432-050-00-00	7029	WALKER RD	GAILEY THOMAS D	GAILEY SHIRLEY L	7029 WALKER ROAD		GEORGETOWN	SC	29440	Q065
77	01-0432-020-02-00	01-0432-020-02-00	7036	WALKER RD	TERRY KERRY LAVON LIFE EST		7036 WALKER ROAD		GEORGETOWN	SC	29440	Q200
78	01-0432-022-00-00	01-0432-022-00-00	7066	WALKER RD	FREEMAN DONALD		7042 WALKER RD		GEORGETOWN	SC	29440	N065
79	01-0432-021-00-00	01-0432-021-00-00	34	WINDUM DR	CLAWSON WAYNE L	MCGRAIL-CLAWSON NANCY E	C/O PERTINS/ELIJAH SANDERS	34 WINDUM DR	GEORGETOWN	SC	29440	Q065
80	01-0432-017-02-00	01-0432-017-02-00		WINDUM DR	THOMAS LINDA J		8249 SAINT DELIGHT RD		ANDREWS	SC	29510	Q302
81	01-0432-020-01-00	01-0432-020-01-00	190	WINDUM DR	TERRY ALTON B		190 WINDUM DR		GEORGETOWN	SC	29440	Q065
82	01-0432-020-01-01	01-0432-020-01-01	212	WINDUM DR	GARDNER JOSHUA MATTHEW		9561 ST DELIGHT ROAD		ANDREWS	SC	29510	N000
83	01-0432-065-00-00	01-0432-065-00-00	290	WINDUM DR	GEORGETOWN COUNTY GOVERNMENT		P O BOX 421270		GEORGETOWN	SC	29442	E930
84	01-0432-019-00-00	01-0432-019-00-00	312	WINDUM DR	THOMAS JAMES CLARENCE HRS		% ANN LAMBERT	1851 WAX MYRTLE DR	FLORENCE	SC	29501	N065
85	01-0432-019-01-00	01-0432-019-01-00	326	WINDUM DR	BRILL PAUL		326 WINDUM RD		ANDREWS	SC	29510	Q100
86	01-0432-013-01-02	01-0432-013-01-02	360	WINDUM DR	JORDAN MOLDON D JR LIFE ESTATE		360 WINDUM DRIVE		ANDREWS	SC	29510	N101
87	01-0432-013-01-00	01-0432-013-01-00	8161	SAINTS DELIGHT RD	WILSON MARCIA P		2383 SANTEE RD		ANDREWS	SC	29510	N200
88	01-0432-062-00-00	01-0432-062-00-00		ST DELIGHT RD	BLAKE AMELIA JOHNSON TRUSTEE		458 DOVE ST		GEORGETOWN	SC	29440	Q302
88	01-0432-015-00-00	01-0432-015-00-00	124	BENNY RD	WICKERSON BEN HRS		C/O ROBERT ELMORE JR	124 BENNY RD	ANDREWS	SC	29510	N065
89	01-0432-064-00-00	01-0432-064-00-00		TOM BLAKE RD	BLAKE AMELIA JOHNSON TRUSTEE		458 DOVE ST		GEORGETOWN	SC	29440	Q302
90	01-0432-064-01-00	01-0432-064-01-00		ST DELIGHT RD	BLAKE AMELIA JOHNSON TRUSTEE		458 DOVE ST		GEORGETOWN	SC	29440	Q302
91	01-0432-064-02-00	01-0432-064-02-00	6679	SAINT DELIGHTS RD	HOLDEN IVAN RHETT		1684 MONTFORD RD		GEORGETOWN	SC	29440	Q302



SILICON RANCH

SR LAMBERT
ADJACENT PARCELS

Attachment C

USACE Wetland and Stream Mitigation Worksheets

LOW GRADIENT STREAM ASSESSMENT DATA SHEET

Stream Name: Stream 3	Basin/Watershed: Sampit River	USGS Quad:
Latitude:	Longitude:	County: Georgetown
Date:	Time:	Investigator:
Stream width: 5'	Stream Depth: 5'	Length of Stream Reach:
Has it rained within the past 48 hours?	Adjacent land use? (Industrial, agriculture, etc): Silviculture	

Habitat	Condition Category			
Parameter	Fully Functional	Partially Impaired	Impaired	Very Impaired
1.Epifaunal Substrate or Available Cover	**Greater than 50% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e.logs/snags that are not new fall and not transient).**	**30-50% mix of stable habitat; well suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but not yet prepared for colonization**	**10-30% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.**	**Less than 10% stable habitat lack of habitat is obvious; substrate unstable or lacking.**
SCORE	2.0	1.5	1.0	0.5
2.Pool Substrate Characterization	**Mix of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common.**	**Mix of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation present.**	**All mud or clay or sand bottom; little or no root mat; no submerged vegetation.**	**Hard-pan, clay, or bedrock; no root mat or vegetation.**
SCORE	2.0	1.5	1.0	0.5
3.Pool variability	**Even mix of large-shallow, large-deep, small-shallow, small-deep pools present.**	**Majority of pools large-deep; very few shallow.**	**Shallow pools much more prevalent than deep pools.**	**Majority of pools small-shallow or pools absent.**
SCORE	2.0	1.5	1.0	0.5
4.Sediment Deposition	**Little or no enlargement of islands or point bars and less than 20% of the bottom affected by sediment deposition.**	**Some new increase in bar formation, mostly from gravel, sand or fine sediment. 20-50% of the bottom affected; slight deposition in pools.**	**Moderate deposition of new gravel, sand or fine sediment on old and new bars; 50-80%of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.**	**Heavy deposits of fine material, increased bar development; more than 80% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.**
SCORE	2.0	1.5	1.0	0.5
5.Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills > 75% of the available channel or < 25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	2.0	1.5	1.0	0.5
6.Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern	Some channelization present, usually in areas of bridge abutments; evidence of past channelization (greater than past 20 yr.) may be present, but recent channelization not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40-80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. In stream habitat greatly altered or removed entirely.
SCORE	2.0	1.5	1.0	0.5
7.Channel Sinuosity	The bends in the stream increase the stream length 3-4X longer than if it was in a straight line (If braided channel, this parameter is difficult to rate.)	The bends in the stream increase the stream length 2-3X longer than if it was in a straight line.	The bends in the stream increase the stream length 2 to 1 times longer than if it was in a straight line.	Channel straight; waterway has been channelized for a long distance.
SCORE	2.0	1.5	1.0	0.5
8.Bank Stability	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. < 5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over; 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosion scars.
SCORE	Left Bank 1.0	0.75	0.50	0.25
SCORE	Right Bank 1.0	0.75	0.50	0.25
9.Vegetative Protection	>90% of SB surfaces and adjacent riparian zone covered by native vegetation, including trees, understory shrubs, or non-woody macrophytes. minimal or no evidence of grazing or mowing; almost all plants allowed to grow naturally	70-90% of the SB surfaces covered by native vegetation but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential more than ½ of potential plant stubble height remaining	50-70% of SB covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than ½ potential plant stubble height remaining.	<50% of SB surfaces covered by vegetation; disruption of SB vegetation is very high; vegetation has been removed to 5 cm. or less in average stubble height.
SCORE	Left Bank 1.0	0.75	0.50	0.25
SCORE	Right Bank 1.0	0.75	0.50	0.25
10.Riparian Veg Zone Width	Width of riparian zone>18 meters; human activities (roads, clear-cuts, lawns, crops, parking lots) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone < 6 meters; little or no riparian vegetation due to human activities.
SCORE	Left Bank 1.0	0.75	0.50	0.25
SCORE	Right Bank 1.0	0.75	0.50	0.25

Total Score: 7.5 Impaired NOTES/COMMENTS:

LOW GRADIENT STREAM ASSESSMENT DATA SHEET

Stream Name: Stream 5	Basin/Watershed: Sampit River	USGS Quad:
Latitude:	Longitude:	County: Georgetown
Date:	Time:	Investigator:
Stream width: 10'	Stream Depth: 5'	Length of Stream Reach:
Has it rained within the past 48 hours?	Adjacent land use? (Industrial, agriculture, etc): Silviculture	

Habitat	Condition Category			
Parameter	Fully Functional	Partially Impaired	Impaired	Very Impaired
1.Epifaunal Substrate or Available Cover	**Greater than 50% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e.logs/snags that are not new fall and not transient).**	**30-50% mix of stable habitat; well suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but not yet prepared for colonization**	**10-30% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.**	**Less than 10% stable habitat lack of habitat is obvious; substrate unstable or lacking.**
SCORE	2.0	1.5	1.0	0.5
2.Pool Substrate Characterization	**Mix of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common.**	**Mix of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation present.**	**All mud or clay or sand bottom; little or no root mat; no submerged vegetation.**	**Hard-pan, clay, or bedrock; no root mat or vegetation.**
SCORE	2.0	1.5	1.0	0.5
3.Pool variability	**Even mix of large-shallow, large-deep, small-shallow, small-deep pools present.**	**Majority of pools large-deep; very few shallow.**	**Shallow pools much more prevalent than deep pools.**	**Majority of pools small-shallow or pools absent.**
SCORE	2.0	1.5	1.0	0.5
4.Sediment Deposition	**Little or no enlargement of islands or point bars and less than 20% of the bottom affected by sediment deposition.**	**Some new increase in bar formation, mostly from gravel, sand or fine sediment. 20-50% of the bottom affected; slight deposition in pools.**	**Moderate deposition of new gravel, sand or fine sediment on old and new bars; 50-80%of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.**	**Heavy deposits of fine material, increased bar development; more than 80% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.**
SCORE	2.0	1.5	1.0	0.5
5.Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills > 75% of the available channel or < 25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	2.0	1.5	1.0	0.5
6.Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern	Some channelization present, usually in areas of bridge abutments; evidence of past channelization (greater than past 20 yr.) may be present, but recent channelization not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40-80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. In stream habitat greatly altered or removed entirely.
SCORE	2.0	1.5	1.0	0.5
7.Channel Sinuosity	The bends in the stream increase the stream length 3-4X longer than if it was in a straight line (If braided channel, this parameter is difficult to rate.)	The bends in the stream increase the stream length 2-3X longer than if it was in a straight line.	The bends in the stream increase the stream length 2 to 1 times longer than if it was in a straight line.	Channel straight; waterway has been channelized for a long distance.
SCORE	2.0	1.5	1.0	0.5
8.Bank Stability	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. < 5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over; 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosion scars.
SCORE	Left Bank 1.0	0.75	0.50	0.25
SCORE	Right Bank 1.0	0.75	0.50	0.25
9.Vegetative Protection	>90% of SB surfaces and adjacent riparian zone covered by native vegetation, including trees, understory shrubs, or non-woody macrophytes. minimal or no evidence of grazing or mowing; almost all plants allowed to grow naturally	70-90% of the SB surfaces covered by native vegetation but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential more than ½ of potential plant stubble height remaining	50-70% of SB covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than ½ potential plant stubble height remaining.	<50% of SB surfaces covered by vegetation; disruption of SB vegetation is very high; vegetation has been removed to 5 cm. or less in average stubble height.
SCORE	Left Bank 1.0	0.75	0.50	0.25
SCORE	Right Bank 1.0	0.75	0.50	0.25
10.Riparian Veg Zone Width	Width of riparian zone>18 meters; human activities (roads, clear-cuts, lawns, crops, parking lots) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone < 6 meters; little or no riparian vegetation due to human activities.
SCORE	Left Bank 1.0	0.75	0.50	0.25
SCORE	Right Bank 1.0	0.75	0.50	0.25

Total Score: 7.5 Impaired NOTES/COMMENTS:

Determination of Stream Credits

3.0 Table and Worksheet

Working Draft, Subject to Change
Last Revised: October 07, 2010

Adverse Impact Factors Table for Linear Systems									
FACTORS	**OPTIONS**								
Stream Type[1]	Non-RPW 0.10		1st and 2nd Order RPWs 0.8			All Other Streams 0.4			
Priority Category	Tertiary 0.1		Secondary 0.4			Primary 0.6			
Existing Condition	Very Impaired 0.1		Impaired 0.5		Partially Impaired 0.75		Fully Functional 1.5		
Duration	Temporary 0.05		Recurrent 0.1			Permanent 0.3			
Dominant Impact	Shade / Clear 0.05	Utility Crossing 0.15	Culvert 0.3	Armor 0.5	Detention / Weir 0.75	Morpho-Logic 1.5	Impound / Flood 2.0	Pipe 2.2	Fill 2.5
Cumulative Impact (LF)	< 50' .01	51-300' 0.10	301-500' 0.20	501-1000' 0.40	1001-6000' 1.5	> 6000' 3.0			

[1] Stream type does not include man-made linear features. These features will be evaluated on a case-by-case basis.

Required Mitigation Credits Worksheet for Linear Systems						
FACTOR	**IMPACT 1**	**IMPACT 2**	**IMPACT 3**	**IMPACT 4**	**IMPACT 5**	**IMPACT 6**
Stream Type	1st & 2nd Order RPW					
Priority Category	Tertiary					
Existing Condition	Impaired					
Duration	Permanent					
Dominant Imparct	Culvert					
Cumulative Impact	51-300'					
Sum of R Factors	2.1					
Linear Feet Impact	69					
R x LL =	144.9					

Total Required Credits = Σ (R x LL) = **144.9**